LOUDSPEAKER

Three-way, reflex loaded loudspeaker Made by: Ouadral GmbH & Co KG. Germany Supplied by: Quadral GB-IE Telephone: 01785 748446 Web: www.quadralgb-ie.co.uk



Quadral Aurum Orkan VIII (£1350)

Good value for money and clean sound are offered by this new German floorstander. So, time to forget old prejudices Review & Lab: Keith Howard

erman hi-fi products have struggled to make an impact on the British market. In the particular case of loudspeakers two factors seem to account for this: the strong presence of the UK's indigenous speaker makers, many of whom have names, if not current owners, with long and distinguished histories; and an enduring prejudice that German listeners like what Brits have long characterised as 'boom and tizz', ie, too much bass and treble.

As I pointed out when I reviewed the Aurum Titan VII [HFN Dec '08], that reputation is no longer deserved - at least so far as some German loudspeakers are concerned. At that time Aurum was imported into the UK by Wireworld, and its traction - my enthusiastic review notwithstanding – appears to have been minimal. Undeterred, Quadral GmbH owner of the Aurum brand and Germany's third largest speaker manufacturer - has determined to try to crack the UK market again by helping establish a dedicated distributorship covering the UK and Eire [see box out].

ALL GERMAN PROVENANCE

If the Aurum Orkan VIII is anything to go by, aggressive pricing is to be one of its core strategies. This three-way, four-driver floorstander is no larger or more extravagantly equipped than many in this area of the market, but it is notably more substantial than the norm (it weighs 31kg) and is better finished too. Moreover, if you're prepared to pay a premium, then even swankier options are available. At the base price of £1350 you can choose the pictured choco oak finish or light oak or cherry; for £150 more you can have high gloss black or white; and for £1675 you can get out the pantone swatches and indulge yourself with any colour of lacquer that you or your interior design consultants desire!

Let's run through the driver complement. Twin 170mm aluminium/titanium/magnesium coned bass units work in parallel up to a specified 330Hz crossover and are reflex loaded by a single large rear-firing port.

Aurum's literature refers to the bass loading being a combination of 'bass reflex and pressure chamber technology' but the exact meaning of that is unclear from what I've been able to find on the Aurum web site. The distinctive aluminium slats we saw in the Titan VII are echoed in the array of vertical rubber cords that adorn the cutout through which the recessed bass units radiate – this may appear purely cosmetic yet seems in fact to be part of the reflex/ pressure chamber bass loading principle.

Above these on the front baffle a third 170mm AlTiMg coned driver operates from 330Hz to 2.7kHz, where it crosses over to a 'ribbon' tweeter - actually an isodynamic type with a flat voice coil etched on to its plastic diaphragm and a quartet of neodymium bar magnets. Although such tweeters are often considered ersatz compared to true ribbons, they are capable of fine performance (Aurum claims a response extending to 65kHz) and are much cheaper to make.

All the drivers are built by Quadral in Germany. Indeed, all the Aurum models are designed, manufactured and assembled in Germany. I don't subscribe to the myth of superior German engineering myself but if you already own a German car, washing machine and fridge, and shave with a German electric razor, you may find this provenance reassuring...

At the back of the cabinet two pairs of input terminals access the split crossover, the lower terminals addressing the twin bass drivers and the upper terminals the midrange unit and tweeter. Short linking wires rather than straps are provided to combine these for single-wire connection.

Like the Titan before it, the Orkan VIII flies in the face of normal practice by not

RIGHT: Twin bass drivers, midrange unit and tweeter are connected in a conventional three-way arrangement but the bass loading combines reflex and pressure chamber design







OUADRAL – A BRIEF HISTORY

The All Group - comprising All-electronic and All-akustik divisions - was founded by four business partners in Hannover in 1972, the latter arm introducing its first Quadral-branded loudspeaker, the Titan, before the end of that decade. Now in its seventh generation, the Titan remains Quadral's flagship speaker and continues to feature a ribbon tweeter like the original, although not its transmission-line bass loading. All ten of the company's top, audiophile speaker products, though, are now sold under the Aurum brand name, which signifies that they are hand-built entirely in Germany, whereas the second-string Quadral-branded range – which has a separate web site - is only partly built there. Quadral's GB and Ireland distributorship, based in Stafford in the West Midlands, was launched earlier this year. Although funded independently from Quadral in Germany, Quadral GB-IE claims a special relationship with the German company that will, for example, see the GB-IE operation assist in developing Quadral's presence in other English-speaking markets such as the USA.

providing floor spikes, or any inserts into which spikes could be screwed. In the case of the Titan its weight was sufficient and its base large enough, arguably, to get away with this although I still preferred its sound when placed on spiked platforms. The Orkan VIII is neither heavy enough nor sufficiently large of footprint for the absence of spiking provision to be justifiable. So with carpet you must either forgo spiking and accept the attendant sacrifice in sound quality or deploy spiked platforms which will detract somewhat from the Orkan VIII's smart looks.

MAKING DISTINCTIONS

In many respects the Orkan VIII delivers a performance concomitant with its classy appearance. It is tonally neutral, easily outdoing the Titan VII in this respect, has tuneful,

well-controlled bass and, thanks to its leaf tweeter, an unusually clean and clear treble. It may seem churlish to ask for more at this price but the one reservation I have concerns how these elements are melded together. All the best hi-fi products are greater than the sum of their parts or - as we used to express it - good at covering their tracks. Failings are easily forgotten, or at least forgiven, because of the cohesiveness of the overall sound.

This, I feel, the Orkan doesn't quite achieve. As that description probably suggests, it isn't an easy characteristic to put your finger on - particularly when certain aspects of the Orkan's performance are so laudable.

I'm thinking here particularly of its fine treble, which really is a cut above that delivered by the average dome tweeter, metal dome or otherwise. Some ribbon tweeters - whether true ribbons or isodynamics like the Orkan's - sound different but wrong, perhaps because they have poor distortion performance (see www.zaphaudio.com for some measurements of this). The Aurum tweeter, though, scintillates without drawing undue attention to itself.

The Orkan VIII was notably good, for instance, at conveying and distinguishing the many different percussion instruments used in Henze's *Prison Song*, ripped from

> what is comfortably the widest dynamic range DVD-A in my collection, Percussion XX [Arts 47558-6] although it has, sadly, a plunging response above 20kHz. But it was noticeable from

the first bars of this piece that the Orkan VIII projects a somewhat narrower stereo image than I'm used to.

Chesky's natural, spacious recording of Christy Baron's stylish take on 'Got To Get You Into My Life', which is even better as a 24/96 download from HDtracks, begins with a crisp but distanced drum break to the right of the soundstage and this too was handled with aplomb, sounding clean and energetic without any sense of being overcooked. Vocal sibilants were also lisp-free, as they were on every male and female voice I played, although this was another track in which the narrowed stereo image was apparent - a characteristic that may encourage you to dispose the →



ABOVE: Split crossover allows for bi-wiring or bi-amping, with single-wire connection realised using wire rather than metal links between the terminal posts

speakers more widely than normal. if you've sufficient room.

The Baron track also highlighted the Orkan VIII's tuneful bass, which seems to have been aligned with more concern for clean transient performance than maximum extension. This was confirmed by the challenging 'Annie's Yellow Bag' from Gwyneth Herbert's All The Ghosts [naimcd135], whose opening combination of bass and drums was well handled. Yet there was a sense that the pace and pizzazz of this piece were somewhat suppressed, so that it lacked the sheer energy it can and should exude.

A TOUCH OF INTROVERSION

This cuts to the heart of my reservations about the Orkan VIII: despite its neutral tonal balance, superior treble and melodic bass, it does sound a little lacking in drama, as a result of which it didn't engage me as fervently as I hoped it would. There's a reserve to its music-making that may appeal to some listeners but will leave others feeling a little distanced from the action. To anthropomorphise, the Orkan VIII is a touch 'introverted'.

One track that highlighted this was 'Country Dreamers', from the HDtracks 24/96 download of Wings' Band On The Run. Everything was there - the distorted opening refrain on acoustic guitar (or is it

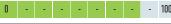
a mandolin or some such?), the descending bass notes, etc - but the rhythmic bounce was diminished. It's as if the Orkan VIII's midrange doesn't project somehow - although there's no evidence of any such lack in the measurements.

Whatever the cause, this is part and parcel of the Orkan VIII's makeup - something I experienced in varying degrees across a range of musical genres and recording styles from purist-miked solo tenor to studio assembled, reggae-influenced Grace Jones – complete with obligatory dynamic range squash. If you are going to live happily with the Orkan VIII, it is a character trait you will just have to accept. \oplus

HI-FI NEWS VERDICT

Impressively built and finished for the price, the Orkan VIII also boasts an unusually neutral tonal balance, notably clean treble courtesy of its isodynamic tweeter, and tuneful bass, perhaps because of the unusual loading of its twin LF drivers. All that's lacking is the touch of magic necessary to turn these fine ingredients into a fully satisfying dish - a pinch of vitality to make the music live and breathe.

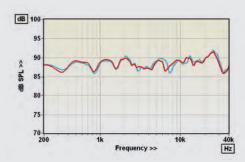
Sound Quality: 77%



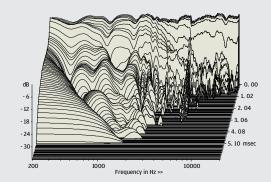
QUADRAL AURUM ORKAN VIII (£1350)

Quadral specifies a sensitivity of 89dB, which is only a little optimistic according to our measured result of 88.4dB on pink noise input. This fairly high sensitivity is achieved in part through low impedance, the specified 4-8ohm range failing to encompass our measured minimum modulus of 2.9ohm at 37Hz. High impedance phase angles at low frequency also result in a low minimum EPDR (equivalent peak dissipation resistance) figure of 1.5ohm at 31Hz, although the next lowest dip of 1.9ohm at 90Hz may be more significant. Either way the Orkan VIII is a moderately challenging load to drive.

Frequency response errors, 200Hz to 20kHz, of ±1.9dB and ±2.3dB for the review pair are unusually low, the on-axis frequency response trend [Graph 1, below] - measured on the axis of the 'ribbon' tweeter, with grille removed - being essentially flat other than for a marginal upward tilt towards high frequencies. Pair matching error, over the same frequency range, wasn't so impressive at ±2.3dB but the largest disparities were above 6kHz, below which the matching was a more impressive ±1.1dB. Diffraction-corrected near-field measurement showed typical bass extension for a floorstander of this size/price, the -6dB frequency being 45Hz (re. 200Hz). Roll-off begins relatively slowly at about 90Hz, suggesting bass alignment has been optimised for transient response rather than ultimate extension. The cumulative spectral decay waterfall [Graph 2, below] shows fast energy decay from the tweeter, albeit marred in one of the test pair by a resonant ridge at about 6kHz. Below 3kHz the decay is lengthened by what look to be breakup modes in the midrange cone. KH



ABOVE: Mild undulations aside, this Quadral speaker offers a very flat and usefully extended response



ABOVE: The cumulative spectral decay shows a mild tweeter resonance at 6kHz and some mid-cone modes

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL/1m/2.83Vrms – Mean/IEC/Music)	88.8dB/88.4dB/88.4dB
Impedance modulus min/max (20Hz–20kHz)	2.9ohm @ 37Hz 13.2ohm @ 12.4kHz
Impedance phase min/max (20Hz-20kHz)	-44° @ 27Hz 31° @ 3.6kHz
Pair matching (200Hz–20kHz)	±2.3dB
LF/HF extension (–6dB ref 200Hz/10kHz)	45Hz / >40kHz/>40kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL/1m)	0.5% / 0.3% / 0.1%
Dimensions (HWD)	1022x222x448mm