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ULTIMATE GROUP TEST >>
LOUDSPEAKERS

FEATURES

- ▶ Aurum Cantus Leisure 3 SE
- ▶ Crane Audio Oceana 5f
- ▶ Harbeth NRG2
- ▶ Quad 21L
- ▶ Spendor S3e
- ▶ Triangle Antal ES

GROUP TEST & LAB REPORTS: PAUL MESSENGER

LOUDSPEAKERS

From compact standmounts to tall floorstanders – this mid-price group has it all

This month's loudspeaker sextet – priced between £500 and £1,200 per pair – is in the middle of the market. The speakers show considerable variety in size and type, as reflects this hotly-contested and important arena.

The Spondor S3e is comfortably the smallest model, but at £795 per pair, by no means the least expensive. Rather, it is one of those perfectly formed near-miniatures, vanishingly discreet yet using top quality ingredients throughout.

Harbeth's NRG2 represents a real departure from this arch-traditionalist. If it lacks some of the Spondor's physical refinement, it offers a more muscular package at a significant cost saving.

Neither of those standmounts can be considered cheap, but both boast British manufacture. This inevitably adds a cost premium, especially when compared to the three Chinese-made models that feature in this test group. That said, our third standmount may come from China, but is also the most costly in the group. However, even a cursory glance at the £1,200 Aurum Cantus Leisure 3 SE suggests it's far from expensive,

considering its superb cabinetwork and classy ribbon tweeter.

It's even harder to argue with the perceived value of the other two Chinese-made models. Crane Audio's Oceana SF is unusual in being a three-way design with an entirely metal alloy floorstanding enclosure. The SF is commonly packaged as part of a home cinema system, but fortunately is also available as a stereo pair, for which the £550 price tag seems very reasonable.

The lovely lacquered bird's eye maple enclosure that graces Quad's Chinese built £695 21L is bound to tempt many. This speaker's compact, two-way floorstanding recipe might not be overly ambitious, but it does have the virtue of simplicity to add to its undoubted visual charm. Whether it's worth the extra £195 over Quad's equivalent stand-mount might be debatable, but it certainly looks better value than the £895 22L we reviewed in HFC 257.

The largest speaker in the group is Triangle's latest £975 ES variation on the Aerial theme (its two predecessors both achieved Best Buy status). This

latest big and solid floorstander might be clad in a rather anonymous vinyl wrap, but it features some serious drive unit technology and a much improved plinth arrangement. **HFC**

EQUIPMENT USED

- Naim CD5 3 CD player
- Barmester 001 CD player
- Linn Sendeck LP12 turntable
- Rega RB1000 tonearm
- Linn Akiva cartridge
- Magnason Dynalab MD 102 tuner
- Naim HAC552 preamp
- Naim IAP500 power amp
- Vertex AQ and Naim cables

MUSIC USED

- Various Artists: *Enjoy Every Sandwich – the Songs of Warren Zevon*
- Fat Boy Slim: *Pinkonkville*
- Kerri Mitchell: *Don Juan's Reclines*
- Daughter
- Mr Scruff: *Keeping It Literal*
- Robbie Robertson: *Robbie Robertson*
- LSO: *Rostropovich: Shostakovich Symphony No. 11*
- BBC: *Radios 3 & 4* were also used extensively

ON TEST



Aurum Cantus Leisure 3 SE
£1,200

Crane Audio Oceana SF
£550

Harbeth NRG2
£550

Quad 21L
£695

Spondor S3e
£795

Triangle Aerial ES
£975

LISTENING TESTS

Loudspeaker listening tests pose more complex problems than those involved in assessing other components. Speakers vary greatly, and interact strongly and often unpredictably with the room. The difficulty facing sequential unweighted loudspeaker presentations is the tendency to judge each according to how its balance differs from the previous model. Accordingly, extended hands-on listening sessions were adopted for this group, giving scope to adjust to the changes in balance and to experiment with the positioning.

LAB TESTS

The speakers were tested under in-room conditions to best represent real world conditions. The equipment used included a Neutrik Audiograph analogue signal generator with synchronised pen recorder, which was used to plot the far-field in-room averaged response traces and impedance plots. Pair-matching was also checked at one metre.

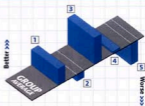
No other magazine offers an equivalent test and listening programme for comparative tests.

LAB REPORTS: THE BAR GRAPH

Our 3D bar graphs are a simple way of showing how the speakers compare across quantitative and qualitative measures. Individual parameters are assessed and shown as better or worse than the group average.

- 1] Sensitivity:** Sensitivity measures how loud a speaker will go for a given voltage from the amp. It's scaled to 2.83V at 1m (one watt for an eight-ohm load). This figure can be misleading, as sensitivity varies significantly and as lower-impedance speakers extract more current and hence power from an amp than higher-impedance ones.
- 2] Bass extension:** A speaker's bass is heavily modified by the room. To replicate 'real world' conditions, our figure represents the averaged bass roll-off frequency at -6dB with reference to the broad midband, measured across the far field for a stereo pair in a 4.3x2.6x5.5m room.
- 3] Ease of drive:** The lower the impedance, the more current it extracts from a driving amp for a given volume. Lower-impedance designs have higher sensitivities, reducing voltage requirements for given loudness levels.
- 4] Overall frequency balance:** Overall broad frequency response trends do much to define the character of a speaker, although true neutrality is the obvious goal.
- 5] Response smoothness:** The small-scale smoothness of a speaker has much to do with the delicacy of the sound, and its ability to deliver subtle harmonic shading.

OUR BAR GRAPHS: AN EXAMPLE



£1,200 per pair @ 020 8459 8113 @ www.aurumcantus.com

AURUM CANTUS LEISURE 3 SE

Lacquered veneer and a ribbon tweeter for less than you'd expect

Although Aurum Cantus had its early roots in Europe, the company's website makes it clear that this is a distinctly Chinese operation. It was founded in 1994 and from the outset specialised in making ribbon-type drivers to handle the top end of the audio band. Combine just such a high-class tweeter with some of the finest poplar burl veneered side-cheeks you'll ever see, and the result is a substantial standmount that looks considerably more expensive than its asking price of £1,200 per pair.

Ribbons have long been highly regarded by audiophiles, from the legendary British Kelly/Decca device of the 1950s to the extraordinary full-range Apogee models of the 1980s. They seem to be on the increase too, as a lot of them were visible (and audible) at 2004's Heathrow hi-fi show a couple of months back. So what makes a ribbon driver special? Essentially, the ribbon itself is the voice coil, unwound and stretched out into a strip so that actually acts as the diaphragm itself – ensuring very direct communication of the signal.

Besides the 100x3mm G351 ribbon, which operates above 2.5kHz, there's a near-point 165mm bass/mid driver with a cast frame and a 115mm diameter carbon fibre/Kevlar loaded cone. The enclosure is very solid as well as beautiful, those beautifully veneered side cheeks sandwiching piano glass back.

front, back, top and base. Useful asymmetry should help avoid focusing the internal standing waves, and clever shaping should assist lateral dispersion. High quality crossover components, fed from a pair of big and beautifully solid terminals, complete the overall luxury bookshelf experience.

SOUND QUALITY

Mounting the Leisure 3 SEs on 600mm tall Kudos S100 stands placed the ribbon at just about the right height to deliver optimum upper-treble output to seated listeners, ensuring maximum transparency. Slightly shorter stands should work equally well, but it is important to make sure that the speakers are mounted at or slightly below ear height, because – as with all ribbon drivers – the highest frequencies are focused into a relatively narrow vertical 'window'. Laterally, dispersion is smooth and wide.

With that proviso, the top end of this speaker is clearly superior to normal dome tweeters in both smoothness and delicacy – so much so, the first impression was that it might be dull. On this occasion, however, that initial judgement turned out to be misleading. The strength of the ribbon tweeter lies more in the way that it doesn't draw attention to itself, and in the subtlety with which it reproduces the most delicate musical nuances without the slightest exaggeration.

Smoothness and evenness are perhaps this speaker's most endearing characteristics, against which must be set some lack of bro and dynamic excitement. The tonal balance is impressively neutral, and the sound is largely free from any 'business' and cabinet coloration. On the other hand, it might be too laid back for some tastes, and the bass end in particular can sound ponderous and heavy with some material, even with the speaker kept well clear of walls. This is a speaker that will be very easy to live with, aesthetically and sonically, and while it isn't the fastest and most dramatic

communicator around, that ribbon tweeter unquestionably confers a very sweet and seductive top end. **HFC**

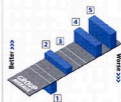


LAB REPORT

The manufacturer's claim for 80dB sensitivity seems a little optimistic here, as our test regime – using a 'real world' far-field in-room average arrangement – comes up with a rather more modest, and perhaps more realistic, 85-86dB. That is a comfortably below average figure, but it's not unreasonable in the context of the decent bass extension (66B at 20Hz under in-room conditions, plus the amphidriety impedance (a minimum of seven ohms at 48Hz and 170Hz).

The reflex port here is tuned to 48Hz, which explains why there's a mid-mid-bass excess in the overall in-room response. There's some general evenness through the bass and lower midband, though the net balance is quite flat here, and things become very smooth and well ordered above 300Hz. Just a slight excess is seen 200Hz-1kHz, to add a touch of forwardness, but the trend thereafter is exceptionally smooth and well extended through the frequency range.

HOW IT COMPARES



- 1) Sensitivity >> -30%
- 2) Bass extension >> +15%
- 3) Tilt of drive >> 0%
- 4) Overall frequency balance >> +30%
- 5) Response smoothness >> +40%

SPECIFICATIONS

Measurement	Rated	Actual
Sensitivity @ 1m/2.83V	80dB	85dB
Impedance (nominal/minimum)	8/5.4 ohms	6/7.4 ohms
Estimated bass extension (6dB)	48Hz	20Hz

VERDICT

SOUND >> 87%	This substantially built and attractively shaped standmount comes from China, which explains how you get the fabulous lacquered veneer and classy ribbon tweeter at a relatively affordable price.
PRACTICALITY >> 83%	
BUILD >> 93%	
VALUE >> 84%	
HFC CHOICE Overall Score 86%	



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CONCLUSIONS

Good looks and great sound – what more do you want from a mid-price loudspeaker?

The wide variations between the models provided the recipe for a most interesting group test, the results clearly illustrating the advantages and disadvantages of the various contrasting approaches.

Working up the price ladder, the extruded alloy casework of Crane Audio's ES50 per pair Oceana SF makes it arguably the most unusual model in the test group. In pure performance terms, the Oceana SF showed genuine promise, though bass extension is limited, and some extra enclosure damping would also help.

Harbeth's new NRG2 is a real departure for the brand, aesthetically and sonically, and if the latter might have been smoother, it's certainly muscular, energetic and involving.

Gorgeous cabinetwork will attract many to Quad's 21L, which might have a similar driver line-up to the Harbeth, but represents a definite contrast in sound character – altogether smoother, but softer and less vigorous.

Spendor's S3e is a beautifully finished and exceptionally compact near-miniature, with a sound that's smooth and well balanced, but a

little limited dynamically and at the frequency extremes. At the opposite end of the spectrum, Triangle's latest ES version of the Antal has serious dynamic expression, and ample bandwidth, but the finish is altogether less luxurious.

Another dramatic contrast comes with the Aum Cantus Leisure 3 SE, which even puts the Quad in the shade when it comes to top quality veneerwork and polished lacquer finish. This chunky and beautiful standmount's ribbon tweeter helps create a big, smooth sound, with laid back but wide range dynamics.

Taking the group as a whole, the Triangle Antal ES arguably takes top honours for sound quality. It might not be top-dog for anyone seeking a warm, smooth ride, but you'd be hard pressed to find a more vital musical communicator on the wallet-friendly side of £1,000. Then again, it trails behind the rest on surface finish and lounge friendliness – similar pros and cons could be applied to any of the models in this or any other group. With loudspeakers, the trick is always to try and find the best compromise to suit your particular preferences and prejudices. **HFC**

TRY THEM WITH THESE

AMPLIFIERS

EXPOSURE 3010 £1,000

A beefy integrated amp with Exposure's typically sweet and involving sound.

SOURCES

SONY A7IA £895

Limited power, but this latest version of a true classic has delightful resolution.

CD PLAYERS

ARCAM DVA CD931T £950

Superior resolution and transparency make an excellent all-round player.

SOUND SOURCES

SONY SCD-XA3000S £800

Does CD and SACD too, the latter in stereo or surround sound.

HINTS AND TIPS

▶▶ Floor-coupling spikes should have tight lock-nuts, but don't over-tighten these or you'll strip the socket threads.

▶▶ Finding the right place to put the loudspeakers acoustically is very important. Make sure you take the time and trouble to experiment.

▶▶ Moving a speaker from a free space location until it's close to a wall will substantially boost the mid-bass.

▶▶ Expect speakers to improve steadily over the first 100 hours or so.

▶▶ Use decent speaker cable, if you want your system to perform at its best.

LOUDSPEAKERS AT A GLANCE



MAKE	Aum Cantus Leisure 3 SE	Crane Audio Oceana SF	Harbeth NRG2	Quad 21L	Spendor S3e	Triangle Antal ES
PRICE	£1,200	£550	£650	£695	£795	£975
SOUND						
PRACTICALITY						
BUILD						
VALUE						
OVERALL						
CONCLUSION	Gorgeous standmount has a very smooth and laid-back sound and delivers a fine sense of scale.	Unusual, alloy-cased floorstander is free from bass, but bass is light and damping could certainly be improved.	Sound lacks smoothness, but this exciting and vivid performer is lots of fun. Sharp styling too.	Lovely high gloss veneer and an attractively smooth and neutral sound at a very tempting price.	This beautifully finished near-miniature is free from bassiness but lacks some dynamic muscle and weight.	Not the prettiest or smoothest-sounding, but great dynamic enthusiasm delivers fine musical communication.
KEY FEATURES						
SIZE (WxHxD)	25x40x20cm	19x10x20cm	19x24x29cm	21x40x25cm	16.5x34x26cm	20x10x14cm
DRIVER CONFIG	2-way	3-way	2-way	2-way	2-way	3-way
MAIN DRIVER SIZE(S)	1x165mm	2x120mm	1x165mm	1x165mm	1x130mm	1x130mm, 2x165mm
STAND/FLOOR	Stand	Floor	Stand	Floor	Stand	Floor
CABINET FINISH	Lacquered real wood	Aluminium alloy	Real wood	Lacquered real wood	Real wood	Vinyl woodgrain
BI-WIRE	N	N	Y	Y	Y	Y
LAB CONCLUSIONS	E = EXCELLENT - G = GOOD - A = AVERAGE - P = POOR					
SENSITIVITY	86dB P	88dB A	90dB G	95dB A	86dB P	91dB E
EXT. BASS EXTENSION	20Hz G	47Hz P	40Hz A	25Hz G	43Hz P	22Hz G
IMPEDANCE (NOM/ MIN)	8/7 ohms E	8/6 ohms G	6/5 ohms A	7/4.5 ohms A	8/6 ohms G	6/3.3 ohms P
OVERALL FREQ. BALANCE	+20% G	-10% A	-20% P	+20% G	-10% A	+19% A
RESPONSE SMOOTHNESS	+10% G	+10% A	-10% P	+20% G	0% A	-15% A