## Quad 22L speaker

Tallest of a new series, this floorstander looks the business

| PRICE    | £895 per pair         |
|----------|-----------------------|
| SUPPLIER | Quad Electroacoustics |
| CONTACT  | 0845 458 0011         |

**For many** enthusiasts the name Quad still represents a pinnacle in hi-fi, even though its founder, the legendary Peter Walker, is long retired and the company has since been in several pairs of new hands. Part of the International Audio Group, which also owns Wharfedale, Quad is now in Chinese ownership, the ward of two highly sympathetic brothers, Bernard and Michael Chang, who have poured millions into IAG, building a dedicated seven-storey factory in Shenzhen, PRC, and employing some 700 people.

Happily, Quad retains much of its autonomy, and is still treated as a precious gem. New product design is by familiar UK-based, Quadassociated names, including Andy Grove for the valve-renaissance kit and the extremely gifted Dane, Jan Ertner, who produced much novel solidstate thinking in the latter days of the Walker regime. Apart from magnets and bulk electronic components, the new factory makes practically everything: drive units, chokes, crossovers, enclosures, cabinets, and printed circuit boards. Few competitors originate as much these days. Component and unit matching is to extremely close tolerances and indeed standards, generally, are pretty much beyond reproach.

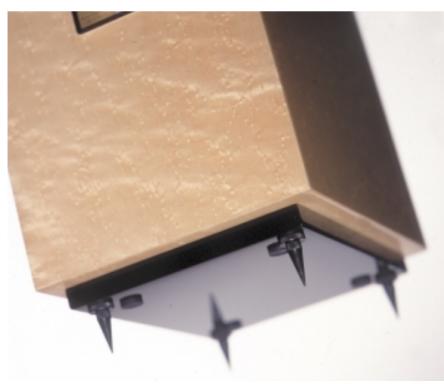
Quad is famous above all for its electrostatic loudspeakers, and happily the recent 988 and 989 models (now, at last, made in China) have enjoyed a rapturous reception. There was a small moving-coil speaker in the 77 Series some years ago (made for Quad by Spendor) but now we are treated to four Quad originals: two 'bookshelf' designs, the 11L and 12L, and two floorstanders, the 21L and the 22L reviewed here. All are 'clean sheet' designs by Steve Hewlett, who has worked at the Shenzhen factory for many months, enjoying more or less complete freedom to pursue his ideas. Magnets apart, no OEM components are used in the new range.

The 22L's cabinetwork is superb. The core material is 18mm MDF finished in real wood veneers of Maple, Bird's Eye Maple or Rosewood, or in a Piano Black. Each is treated to the same six-coat lacquer (effectively a glaze) and the remarkably modest price tag of £895 per pair applies to all four finishes. Smart tailoring at a keen price might lead to suspicions about the quality of the lining, but be assured: there are no compromises here. The pricing is feasible only because practically everything is made in-house.

A 'two-and-a-half way' design, the 22L uses two 165mm bass drivers, the lower of which is mass-loaded to help restrict its contribution to the extreme bass. Internally the cabinet is divided by a sloping partition between the two drivers. The lower enclosure is reflex loaded by a tubed port at the rear; the upper is sealed and has a vertical brace running around the internal side walls, the partition and top. Both volumes are damped with a generous lining of absorbent fibre wadding.

The long-throw bass drivers are built in diecast chassis and have impregnated woven Kevlar cones with convex roll surrounds. Each has a central phase plug to enhance axial rigidity and improve off-axis dispersion. Coils are hand-wound on vented aluminium voice coil formers. The ferrofluid damped/cooled tweeter has a 25mm soft dome and a neodymium magnet. The engineering is impeccable throughout. The crossover is simple, using just eight components, and is built on a PCB mounted in the rear of the upper

• Rear view shows port and bi-wiring option while (left) floor spikes come as standard





## auditions

enclosure. It is split for bi-wiring, so four goldplated 4mm socket/binding posts are fitted (linked with bars as supplied, for a conventional two-wire feed). Nominal impedance is 6 ohms, confirmed by my measurements, which revealed peaks at around 63Hz (14 ohms) and 16kHz (17.5 ohms); nowhere does it drop below 4 ohms. Sensitivity is quoted at 89dB for 2.83V at 1m.

Audiophile-grade cable is used throughout except for the final few inches to the tweeter which revert to the rather thinner captive wire emanating from its housing, though that is more a surprise than an obvious compromise.

Quad's Julian Maddock had the bright idea of loaning me a pair of the small 11L loudspeakers along with the 22L – for comparison and to confirm the 'family' approach. The balance between the two is indeed remarkably similar, such that with music which makes only modest low frequency demands - a string quartet, for example - you'd be hard put to hear the difference at first, in most respects, although that extra bass capability does, as ever, articulate the surrounding acoustic. But this is keen synergy and I can imagine a very effective, and certainly musical, multi-channel set-up based on 22L at the front and 11L at the rear, plus (if you must) a subwoofer tucked away somewhere. And jolly smart it would look too.

But back to the 22 alone. Listening through an extended programme of carefully chosen and analytically demanding source material — music of all types, ranging from piano solo, chamber, orchestral, solo vocal, opera to a few rock and jazz favourites — confirmed the loudspeaker's essentially neutral balance. It has few foibles and

## TECHNOLOGY

This so-called 'two-and-a-half way' design using a weighted, reflex-loaded lower bass driver to complement a sealed-box loaded bass/mid unit. Woven Kevlar cones give an excellent stiffness-to-weight ratio with good inherent damping. Vented aluminum voice coil formers provide excellent heat dissipation to minimise thermal compression. Treble is handled by a Ferrofluid damped/ cooled soft dome tweeter. The well integrated mechanical behaviour of the three units has enabled the use of a simple crossover.

## KEY FEATURES

- Floor-standing design using three drivers
- All key components built in-house
- Straightforward load and good sensitivity
- Superb lacquered cabinet
- Frequency range 30Hz–24kHz



none that I could attribute specifically to the reflex loading of the lower bass — usually the area where that last bit of control is sacrificed for extension. Here it is firm and essentially 'tuneful'.

There's a small contribution from the cabinet at around 400Hz and 650Hz on steady-tone signals but on music this is barely apparent, detected primarily as a little additional warmth on some source material, though this can be ameliorated somewhat by careful positioning. Quad recommends at least 30cm from the side walls and 20cm from the rear, but in my loft room they profited from rather more space at the rear, and I suspect this would apply in most rooms. Notably successful are the stereo articulation and image stability, both of which would embarrass more than a few similarly specified competitors, though the 22L does not, of course, have the sheer transparency of the vastly more expensive electrostatics.

The Quad 22L treats all types of music equally well: it is crisply responsive to the transient demands of studio-based rock, well able to decode complex orchestral textures, truthful in its presentation of the human voice. It is quite roomsensitive so needs careful positioning to give of its best, but once settled is a star performer, comfortable with its distinguished pedigree. Physical presentation is quite simply immaculate and at the price the 22L represents exceptional value for money.

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