

Quad's 988s – worth the wait

Not for Quad the annual product cycle – the 988s are its first major speaker upgrade for almost 20 years. But the wait has been well worthwhile, says Ketan Bharadia

Quad could never be accused of rushing its product launches. After all, it has produced just three generations of electrostatic loudspeakers in four decades, starting, of course, with the original ESL back in 1957.

That speaker's replacement – the ESL 63 – finally broke cover in 1981, its name signifying the year development work on the design started. Now, 20 years on, the next generation electrostatics – the ESL 988 and ESL 989 – are making their appearance. Like I say, you can't accuse Quad of rushing.

The subject of this review is the cheaper of the two new speakers, the ESL 988. The £4600 ESL 989s are essentially the ESL 988s on steroids, and with an extra bass panel, and are meant for use in larger rooms where their greater volume and low frequency capabilities may be needed.

Before going into details of the 988, a bit of background information may help. After all, the way electrostatic loudspeakers work is very different from the usual combination of one or more moving coil drivers in a wooden box. For starters, the ESL 988 uses just one driver in the form of a lightweight sheet made from a material called Mylar. Think of it as a piece of non-stretchable clingfilm and you'll be close to the mark.

This sheet is electrically charged and lives between two highly charged electrodes whose voltages are modulated by the music signal.

Quad 988

Type Electrostatic loudspeakers

Price £3500/pr

Sensitivity 82dB/W/m

Impedance 4 Ohms

Power handling 65 Watts

Power consumption 5 Watts

Dimensions

(W x H x D) 67 x 94 x 30cm

Weight 20.5kg each

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Changes in the electrostatic field cause the Mylar sheet to move across its whole area, so creating sound. But the really clever thing about the ESL 63, and subsequently the ESL 988, is that the designer, Peter Walker, came up with a way of making this flat diaphragm behave like a point source radiator – considered by most people to be the ideal. This is done by arranging the electrodes in the form of concentric rings connected by calibrated delay lines: the signal goes into the centre first and is then fed outward. In theory, at least, this implies superlative stereo imaging.

The use of a single driver also means there is no crossover, so at a stroke all the associated coloration, loss of detail and phase problems of such a circuit disappear.

Another feature of electrostatics is that they do without a conventional cabinet: instead, an open frame supports the Mylar sheet. While this eliminates the resonances associated with box enclosures, it also means that speakers such as the ESL 988s fire as much sound backwards as they do towards the listener. This has some serious implications for installation, more on which later. The ingredients of a single lightweight driver combined with the lack of crossover and cabinet would suggest that the 988s would be pretty flawless, wouldn't it? And, in practice, the Quads are very good, but not quite perfect...

The sound from the Mylar diaphragm has to pass a number of obstacles before it reaches the listener. These start with the electrodes and continue with a Mylar dustsheet and a perforated steel safety screen. The metal screen stops objects such as screwdrivers damaging the speaker and leaving the user vulnerable to shocks in the region of 5000 volts.

Great care also has to be taken with both system matching and room positioning if the 988s are to give their best. The general advice on the proper positioning of these speakers is to place them well away from a back wall, ideally about two-thirds of the way up the room so that the rearward radiating sound doesn't interfere too much with what is aimed forwards. A slight amount of toe-in is beneficial, too, which helps fine-tune the stereo imaging.

Take such notes as a starting point, since these speakers are quite possibly the most fussy to position that I've ever used. That's not to say they sound bad if not optimised, but rather they can sound phenomenal if pampered. It is also a good idea to place some

absorbent material such as heavy curtains on the wall behind, once again to help tone down the rearward sound output. If appropriate care is taken there's no reason why these Quads won't work well in smaller rooms; I managed to get some great sounds in a room that is just five metres by four.

Equipment matching is equally important, as the Quads are frighteningly revealing of any shortcomings in the electronics. Despite their low-rated sensitivity of 82dB/W/m a very high-power amplifier isn't necessarily your best bet as these Quads won't really accept hundreds of Watts without complaint, and maximum SPLs (sound pressure levels), while good, really aren't enough to rattle the furniture.

Rather, the speakers need a refined partner that'll make the most of their resolution and speed. I used both a 300-Watt per channel Krell KRC-3/FPB 300C and 50 Watts per channel DPA 50S pre/power combinations with equally good results.

I've spent many hours with these speakers over the past couple of months, and even now they stagger me with their resolution. Recordings that I've used regularly while reviewing, such as Holst's *Planets* conducted by Solti (Decca, 5/91), are revealed as having far more layers of detail than I ever suspected.

With 'Mars', the 988s' magnificent timing shines through in the surefooted way they deal with the ever-increasing pulse of the music. The absence of phase problems associated with multiple drive units and crossover really counts here.

No matter how complex the piece gets, these Quads stay composed and controlled as they reproduce each musical strand with real control and superlative definition. The responsiveness of the Mylar driver shows in the speed at which this speaker reacts to low-level transients; little that I have heard can better the Quads in this respect while retaining the same sense of neutrality. The reproduction of instrument timbre is excellent, lending the sound overall a most natural and convincing feel.

The theory of the concentric electrodes seems to work in practice as the 988s can produce an image of astonishing focus and precision. You've probably read it a thousand times in reviews, but this



Flat panels with a three-dimensional sound – the new Quads look familiar, but have a greatly improved sound

really is reach-out-and-touch standard. A prime example is 'Live At Vatnajökull' (Opus 3) performed by Mattias Wager and Anders Åstrand. Here the instruments are laid out with pinpoint precision in all three dimensions, yes, there's even height information, the organ seeming to originate high above the rest of the instruments.

This is an astonishingly detailed design that offers world-class resolution, excellent dynamics and real neutrality.

Shortcomings? Well, no speakers are perfect. As I've already suggested, if you have a very large room, the 988s would struggle to provide high-enough volume levels. Also, while these speakers aren't lacking in bass – there's decent output to 50Hz – they still don't reach down with the punch and depth that rival designs from the likes of B&W and Wilson Benesch do. Quad has an answer to both these criticisms in the form of the 988's big brother, the 989.

But even as it stands, the 988 is a fabulous speaker design by any standards. Granted, it isn't perfect, but at the price I've heard nothing that I'd prefer. In fact, even if price weren't an issue I'd be hard pushed to find speakers that better the 988s' combination of talents in my listening room. I can't recommend them too highly. **G**