

Mission accomplished

MARTIN COLLOMS FIRST ENCOUNTERED AN EARLY VERSION OF MISSION'S 770 SPEAKER IN A GROUP TEST OF 40 MODELS BACK IN 1978 FOR *HI-FI CHOICE*, AND WAS STILL REVIEWING LATER ITERATIONS UP TO 1983. NOW THERE'S A NEW VERSION...

Mission's founder, audio enthusiast Farad Azima, didn't appear out of the blue. An émigré from Iran, and a Leeds University psychology post-graduate, he began his commercial audio involvement in the 1970s by founding London's Webland Electronics, launching the then-famous US brand KLH onto the UK market. Subsequently, finding the US 'flavour' less suited to the UK in that period, he was determined to establish his own loudspeaker brand: Mission Electronics.

The 770 was his first product, and remained on the market for many years, Farad's passion for musical excellence constantly improving the design. It was distinguished by its distinctive off-white front panel: Farad frequently turned up at my flat with the latest version stowed in the boot of a noisy race-tuned Series 1 Audi Quattro, also in white.

Mission is now part of IAG, and Peter Comeau – IAG's Director of Acoustic Design – has supervised the recreation of the Mission 770, the £3,500 pricing of which includes stands. It's just about right when the price of the original (£300 a pair plus stands) is put through an inflation calculator.

The original 770 mid/bass driver employed a translucent vacuum-moulded cone of polypropylene 'PP' co-polymer, derived from a BBC licensed formula attributed to Dudley Harwood, and built on a 200mm die-cast frame with eight-point fixing.

The driver for the new, British-built 770 has a cone of revised thickness and contour/profile to extend and smooth the frequency response, aided by judicious mineral loading to increase stiffness and extend its upper frequency bandwidth. A new surround, revised in density, damping and profile, offers an improved termination to the cone periphery; the new chassis, still of die-cast alloy, is improved structurally, and uses six-point fixing.

High frequencies were originally provided by a SEAS 25mm soft polymer dome unit; in the latest version they're handled by a 28mm microfibre dome coated with the usual stiffening-damping layer, its low-frequency bandwidth extended by the now-popular rear chamber, loaded with backwave absorbent working as a graded termination.

The original crossover design was first order for low frequencies, namely a single series inductor, married to a second-order LC filter feeding power to the high frequency section. The low-pass 'bass' section is now second-order, tuned to a lower Q factor to better shape the alignment, smoothing the

power transition to the high-frequency unit, while the network now employs selected high-voltage rating polypropylene film capacitors, with closer tolerances for both crossover and the drive units.

Extensive listening

Peter explained that hundreds of hours of listening were devoted to fine-tuning this new crossover: 'Producing the new 770 has been a labour of love for me. I remember the sheer exuberance and sense of

