Press release



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Above New Mission 770 with black wood finish on matching stand

Classics rock

Mission resurrects a classic speaker from its formative years, the iconic Mission 770, re-engineering the design to fuse vintage style with cutting-edge performance – and made in the UK too!

Cambridgeshire, England – Mission is one of Britain's best-loved loudspeaker brands, established on 07/07/1977 by the late Farad Azima (who was famously fond of the number seven). The following year, Mission launched a speaker that rocketed the company to the forefront of the burgeoning British hi-fi scene – the highly influential Mission 770.

44 years on from its debut and Mission is bringing back the 770 – re-engineered to reap the benefits of modern techniques and technologies whilst invoking the spirt of the original in terms of technical ethos, look and sound.

The appeal of the Mission 770 was always the way it sounded. That might seem obvious, but it was born in a time when subjective evaluation through listening tests was secondary to technical specifications – both in terms of how products were designed and how they were reviewed. On the face

of it, the original 770 did not appear especially radical, despite its distinctive white baffle and clever engineering. But crucially, its sound was perfected over hundreds of hours of listening tests with input from budding industry luminaries such as Philip Swift and Derek Scotland (soon to be founders of Audiolab), and magazine editors such as Paul Benson of *Hi-Fi Answers* and John Atkinson of *Hi-Fi News*. This gave it an edge over the competition and a reputation for exemplary sound was quickly earned.

The project was a labour of love for Farad Azima. His intention was to deliver the BBC-influenced midrange accuracy and transparency of a speaker like the Spendor BC1 while also achieving tighter bass and a more propulsive and engaging sound. It was a breath of fresh air that put the music first and gave definition to the term 'musicality'. This was the essence of its success.



Left Pair of Mission 770s with walnut veneer – one with grille on, one with grille off – sited on their dedicated stands

Back to the future

These days, Mission is part of the International Audio Group – the custodian of famous British audio brands that also include Audiolab, Castle, Leak, Quad and Wharfedale. The popularity of Wharfedale's recent Linton and Denton revivals (two classic British speakers from the 1960s and '70s), as well as the arrival of the first new Leak electronics for more than 40 years, emphatically shows there is great demand for the reappearance of classic, much-loved British designs in re-engineered form.

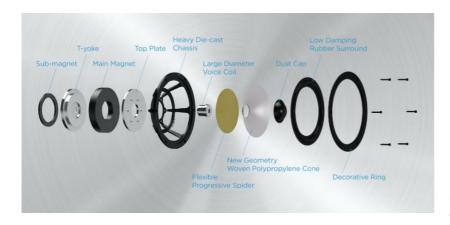
Nostalgia is a part of what fuels this demand, but it is also a recognition that these designs have stood the test of time, exuding authenticity and engineering gravitas often lacking in the age of smart speakers and digital streaming. This appeal goes hand-in-hand with the recent vinyl revival – products that were created for a simple, singular, tangible purpose: the sheer enjoyment of music.

This, then, is the ideal time to bring back the Mission 770 in re-engineered form. The new speaker is faithful to the original blueprint – one of the most influential British speakers of all time – whilst making full use of modern techniques and technologies to elevate its performance to an entirely different level. The sonic spirit of the original is intact; but its sound and build quality have evolved to deliver a speaker that meets and exceeds customer expectations in 2022.

Labour of love

The project's design and engineering team was led by Peter Comeau, Mission's current Director of Acoustic Design. Peter was a young reviewer for *Hi-Fi Answers* when the original 770 launched and well remembers its impact (he subsequently co-founded loudspeaker maker Heybrook in 1979). For Peter, the new Mission 770 is a labour of love; just as it was for Farad Azima all those years ago.

When Peter revisited the original speaker at the start of the project, he confirmed that two key elements were fundamental to its highly musical performance. First, its polypropylene cone – claimed to be unique in a consumer product at the time – and second, the impressive resonance control of the cabinet. Naturally, these elements also became the cornerstone of the re-engineered design, yet every part has been improved – from the drive units, to the crossover, to the cabinet – bringing the design thoroughly up to date whilst capturing the musical spirt that was so refreshing when the original speaker arrived on the scene.



Left Mission 770's completely redesigned mid/bass driver assembly with new-formulation polypropylene cone

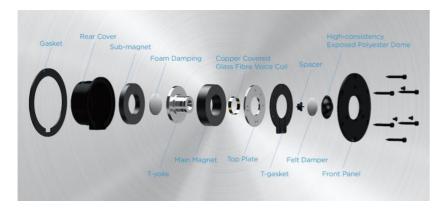
Key elements: the drive units

A new 20cm polypropylene mid/bass driver was developed for the re-engineered 770, mimicking the extended response and low coloration of the original, while upgrading the motor system to take account of modern power handling and dynamic requirements. Like the original, the driver is built onto a die-cast chassis with large rear 'windows' to reduce early reflections back through the cone. Special care has been taken to marry a low-density nitrile surround to the cone, to match its impedance and reduce reflections from the cone edge.

The new polypropylene cone is loaded with minerals to make it stiffer than the original, yielding fast, tight bass that enables the listener to hear exactly how bass instruments are being played. This is balanced by tuning the cabinet and reflex port to a very low frequency, avoiding the 'one note bass' that is typical of a lot of bass reflex systems. In addition, the port is strongly flared at both inlet and outlet to smooth airflow and eradicate distortion. Bass extends powerfully and cleanly to below 30Hz in room, which is remarkable for this size of speaker.

In the original 770 design, Farad Azima focused on the midrange performance, which was always the strength of hi-fi reproduction from vinyl records. For today's digital sources and superior turntables, the

performance of a speaker at the frequency extremes is now considered of equal importance to the midrange. The new 770's treble unit uses a lightweight, damped microfibre dome with an ultra-smooth response, backed by a damped rear chamber that pushes the fundamental resonance well below the crossover region. The quality of this 28mm dome marries perfectly with the mid/bass driver to ensure evenness of character throughout the range of the whole speaker.



Left All-new treble unit with 28mm microfibre dome delivers smooth and extended high-frequency performance

Key elements: the crossover

The original 770 used a single coil to equalise the bass to midrange response as well as cross over to the treble unit, the latter driven by a resistor, capacitor and coil combination. Using just these components to perform both functions was always going to be a compromise, and this is likely the reason why Farad Azima could not resist tinkering with the crossover and producing so many variants.

Today's advanced software crossover mapping and measuring techniques allow Mission to perfect the balance between bass and midrange and adjust the crossover to the treble unit by mapping the acoustic crossover slopes with extreme accuracy. Even so, the choice of EQ and crossover for the new 770 involved hundreds of hours of listening sessions using a wide variety of music, and over 170 circuit iterations were tried before the final crossover was settled upon.

The circuit was then mapped out onto separate bass and treble PCBs using very short signal paths and accommodating high-quality components such as super-transparent polypropylene capacitors and air core inductors, maintaining the simplicity and elegance of the original whilst improving critical elements. The resulting transparency to musical detail ensures the thrilling emotion of music is fully conveyed, whilst maintaining a seamless transition between the mid/bass and treble units.

Key elements: the cabinet

The drivers and crossover are housed in a real-wood veneered cabinet, measuring 59x30x30cm (HxWxD), with a white laminated front baffle echoing the style that made the Mission 770 a stand-out hi-fi product in the 1970s and '80s. Beneath the rich, rosy-tinged walnut or black veneers lies a further technological advancement. While the original 770 reduced midrange coloration using the BBC-influenced technique of a thin-wall cabinet damped by mass loading with bitumen pads, the new 770 features a twin-wall sandwich of high-density MDF and particle board bonded by a layer of

high-damping adhesive. This results in a cabinet with panel resonance well below audibility, allowing the drive units to do their job unsullied by cabinet coloration at all frequencies.

Internal bracing adds strength to the front baffle and braces the drive unit to the cabinet, creating a mechanical support that aids the dynamic performance of the bass unit and reveals the microdynamics of the musical performance. This is complemented by a layer of acoustic foam and damping fibre, strategically placed to absorb reflections inside the cabinet without overdamping the bass quality.

Peter Comeau is justly proud of what he and Mission's acoustic engineering team have achieved. Speaking about the launch, Peter said: "To repeat the original 770 brochure's claims of 'staggering bass definition and response; lack of coloration; uncanny imaging; information retrieval; transient attack; depth and perspective; accuracy and linearity; speed and dynamic range' is only to hint at the true capabilities of the new 770. Instead, we prefer to focus on its uncanny ability to reveal the true depth, emotion and drama of whatever music you care to feed to it. A much-loved British hi-fi classic has been emphatically reborn."



Left Not only designed in the UK but made here too, thanks to new production facilities in Huntingdon, Cambridgeshire

Made in the UK

The new Mission 770 is not only designed and engineered in the UK; it is made here too. Mission's parent company, IAG, has expanded its facilities in Huntingdon, Cambridgeshire – the traditional home of Mission – to incorporate key manufacturing, assembly and finishing processes for specially selected products, in addition to the R&D function already located here. A 9,000ft² production facility has been added to the existing building in Huntingdon, including a new anechoic chamber, making a total of 25,000ft² of office, lab and manufacturing space.

Like most British audio brands, especially those operating at the more affordable price points, manufacturing of Mission speakers was moved to Asia (to IAG's purpose-built factory) many years ago – essential in order to maintain retail prices at the level the market demanded – while design functions such as R&D and industrial design remained in the Huntingdon. IAG's new Made in the UK initiative has been devised to enable the manufacture of specific products to be brought back to the UK without skyrocketing costs.

'Heritage' products are the focus of this initiative – speakers that are steeped in British audio history, where 'Made in the UK' adds to the sense of historical authenticity. The new Mission 770 is the first to benefit; products from other brands within the Group, including Wharfedale, Leak and Castle, are set to follow.

Price and availability

Manufacturing of the new Mission 770 is now under way, in strictly limited quantities to serve the most discerning of music lovers. The first pairs will be available to purchase from the end of March, in a choice of walnut or black wood veneers, at an RRP of £3,500 per pair.

The price includes a pair of dedicated floor stands, custom made in the UK to ensure each speaker is positioned at the perfect height, with a damped carbon steel frame and large stainless steel spikes to protect from unwanted vibrations. The package is completed by a set of stainless steel spike seats for hard floors and a pair of handling gloves.

Building on the iconic style and consummate musicality of the original design, the new Mission 770 is set to capture the hearts of music lovers all over again.



Specifications	Mission 770
Speaker type	Two-way standmount
Enclosure type	Bass reflex
Treble driver	28mm microfibre dome
Mid/bass driver	200mm mineral-loaded polypropylene cone
Sensitivity (2.8V @ 1m)	88dB
Nominal impedance	8 Ohms
Recommended amp power	25-200W
Frequency response (+/-3dB)	42Hz-20kHz
Bass extension (-6dB)	30Hz
Crossover frequency	2.9kHz
Cabinet volume	38.5 litres
Speaker dimensions (HxWxD)	590x300x322mm (inc. cable terminals)
Weight (each speaker)	19.2kg
Stand dimensions (HxWxD)	445x300x300mm
Weight (each stand)	17.9kg



Mission has built a world-class reputation for advanced audio design since the company's formation in Huntingdon, Cambridgeshire in 1977, with an engineering-led approach to product development that has resulted in some of the most popular and iconic loudspeakers ever devised.

Three things have always characterised Mission speakers. First, the cabinets and drive units use innovative materials and sport a distinctive, modern appearance. Second, the sound they produce is fast, detailed and engaging. Third, they deliver excellent sonic and material value for money.

Today, Mission continues to stretch the boundaries of what can be achieved at specific price points, pioneering technologies to create fresh, new designs. The brand now benefits from the unrivalled manufacturing facilities and global reach of parent company IAG, with all the component parts of every speaker made in-house. Yet the company's roots remain firmly entrenched in Huntingdon, where much of Mission's design, servicing and technical support work is still carried out. This, coupled with a design team brimming with homegrown talent, ensures Mission speakers remain as impressive today as they were when the company first established itself at the forefront of the burgeoning British audio scene some 45 years ago.

www.mission.co.uk



For more information, hi-res images and sample requests, please contact Tim Bowern T: 020 8654 8945 M: 07854 966071 E: tim@hashstar.co.uk