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Magico M6 Floor Standing, Three-Way, Five-Driver Loudspeaker

HAYWARD, CA – Magico, the **Leader in High-Performance Loudspeaker Design and Manufacture**, is pleased to announce the M6 which establishes a new pinnacle of engineering and design vision at Magico.

Since the release of the M-Project in 2014, Alon Wolf and his engineering team have worked to expand upon the ground breaking designs that were first introduced in the critically acclaimed product which included the application of carbon side panels.

The new M6 represents the culmination of such efforts and a major advance in loudspeaker design. The most compelling aspect is the six-sided, monocoque enclosure sculpted of ½" carbon fiber, leveraging the latest Aerospace materials and technologies. Similar to the external shell of an F-35 fighter jet, this method of construction increases the structural strength-to-weight ratio by a factor of 60, while reducing overall weight by 50% and yielding outer dimensions that are 30% smaller without compromising internal volume. The curved interior and exterior walls minimize internal standing waves and eliminate external diffractions.



Four massive aluminum billets are meticulously machined to produce a continuously curved exterior with no angles. A thick-machined aluminum inner baffle supports the drivers, while ten aluminum tension rods extend front to back to further stiffen the enclosure and eliminate the possibility of hardware loosening overtime.



The new M6 enclosure is completely sealed and, in its finished form, has nearly zero diffractions which allow sound waves propagated by the transducers to disperse naturally without obstruction. This creates a sound-field that replicates that of the recording space and allows the speaker to completely vanish in its environment.

A slight curvature in the machined front baffle enhances the seamless integration of all five drivers and provides an elegant appearance overall. The newly designed 3-point MPOD base provides a perfect coupling platform to the floor and supports the M6 as though it were floating in space.



A new reverse horn-shaped sub-enclosure made of proprietary carbon fiber composite houses the midrange driver and provides an extremely stiff, yet ideally damped, chamber that disperses internal standing waves without the need for copious internal damping materials.



TWEETER highlights

The new M6 also incorporates a more efficient version of the revolutionary tweeter found in the M-Project. A 28mm diamond-coated beryllium diaphragm with optimized geometry, created using state-of-the-art Finite Element Analysis modeling tools, brings the M6's high-frequency reproduction one step closer to perfection. This was achieved by skillfully leveraging beryllium's physical properties, making the tweeter closer to the theoretical ideal without gaining the extra weight normally associated with diamond's specific gravity. This technology allowed Magico to increase the dome diameter to 28mm, improving many aspects of performance and allowing even greater power handling. Combined with a new motor system and new acoustically improved back chamber, the new M6 tweeter has the lowest distortion measurements of any high-frequency transducer.

MIDRANGE highlights

The M6's new 6" midrange driver features Magico's superior Graphene-based cone material which is 30% lighter and 300% stiffer than that of its predecessors. This driver utilizes an underhung neodymium-based motor system that leverages an extra-large magnet and a top-stabilizing magnet to ensure a perfectly stabilized magnetic field of 1.7 Tesla in a 15mm air gap, culminating in a pure vented titanium voice coil. The latest 3D laser scanning techniques were used to allow for unparalleled precision in assembly, ensuring optimal behavior in each driver's frequency range while reducing non-pistonic motion and minimizing distortion components. The midrange driver has +/-6mm of stabilized excursion capability at very high sensitivity, enabling 120dB (at one meter) of distortion-free playback in the midrange frequencies.

BASS highlights

Deep, powerful, and accurate bass frequencies result from three newly designed 10.5-inch Magico bass drivers that are produced with advanced manufacturing techniques using a new multi-wall carbon, Nanographene cone. Like the Q7 before it, a colossal effort was made to minimize eddy currents in the iron parts of the underhung motor system of the M6 bass drivers. Eddy currents are created by the voice coil movement and produce chaotic magnetic fields which work against the fixed magnetic field and thus create distortions. The best way to reduce these currents is to saturate the iron as much as possible. When the iron around the coil is totally saturated no induced flux can develop, i.e., no eddy currents. In order to do that a lot of design work, precision machining of the parts, and a huge radical neodymium SD magnet system is required. The results are near 90% saturated iron (industry standard is less than 20%). These are breakthrough characteristics that enable the voice coil to move without any electromagnetic obstructions (the inductance of the woofer is measured at 0.085mH). This powerful magnet structure controls a 5-inch pure titanium voice coil that has 1 inch of linear excursion and produces clean, undistorted sound pressure levels up to 120dB @ 50Hz/1-meter.

All five drivers in the M6 are acoustically integrated using Magico's exclusive Elliptical Symmetry Crossover topology that utilizes state-of-the-art components from Mundorf of Germany. The dividing network maximizes frequency bandwidth while preserving phase linearity and minimizing intermodulation distortion. Individual driver performance, and the loudspeaker in its final form, are tested and optimized for acoustical, mechanical, electromagnetic, and thermal behaviors using the latest state-of-the-art Finite Element Analysis simulation testing equipment.

We invite you to audition the most technologically advanced Magico ever created.



Driver complement:	
Tweeter:	
Midrange:	
Bass:	

Specifications

1.10"	Diamond-Coated Beryllium Dome (x1)
6"	XG Nanographene Cone (x1)
10.5"	XG Nanographene Cone (x3)

Measurements: Sensitivity: Impedance: Frequency Response: Minimum Recommended power:

Dimensions: Weight: 57"H x 26"D x 20"/15"W (143 cm x 66 cm x 51/38cm) 390lbs (177Kg)

Suggested US Retail Price:

\$ 172,000/pair

91dB

4 ohms

30 Watts

22Hz – 50 kHz

Ship date:

3rd Quarter 2017

Watch the video https://vimeo.com/216956417

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