



NEXO'S NEW BÉBÉ: THE GEO M6 COMPACT LINE ARRAY

FRENCH LOUDSPEAKER MANUFACTURER NEXO IS OFF TO A FLYING START WITH ITS NEW GEO M6 COMPACT, PREVIEWED IN THE SPRING AND NOW ENJOYING AN ORDER BOOK THAT IS UNPRECEDENTED IN NEXO HISTORY, AS TPI DISCOVERED.

The new GEO M6 is the latest member of an illustrious family. NEXO's GEO Series itself dates back to 2002 and the debut of GEO S8, a super-innovative interpretation of line array design principles presented in the smallest and lightest package then available.

NEXO product design focussed on achieving high SPL levels which were tightly consistent, homogenous throughout the audience area, and delivered high intelligibility. From day one, GEO Series has featured three patented technologies.

The Hyperboloid Reflective Wavesource Wavesource differs radically from the megaphone-variant type horns people know and love (or hate). NEXO's HRW produces precise and predictable results by controlling the spherical expansion of the acoustic

pressure wave using an acoustic mirror instead of coercive sidewalls. Multiple HRWs can be combined without interference or loss of coherency since the hyperboloid acoustic mirror has a virtual source behind the speaker enclosure, as well as a real source inside the enclosure.

The Directivity Phase Device (DPD), which needs no operator input to function, enables multiple woofers to couple effectively at higher frequencies than would be possible with simple direct radiating cones. Thirdly, the CDD Configurable Directivity Device is a waveguide that allows the operator to alter its behaviour. Easy to use - once you know how and when - the CDD alters diffraction slot dispersion so that the GEO wavesources' exponential flare controls dispersion in the non-

coupling plane.

These three technologies, so fundamental to the DNA of the popular GEO Series, are now harnessed to NEXO's design philosophy of flexibility and scale through modularity. The new GEO M6 is so versatile that, unlike many manufacturers, NEXO doesn't stipulate any minimum or recommended system configurations at the point of sale. Use one cabinet in a theatre for lipfill: use 24 a side for a fully featured stage sound system, plus any variation in between.

So, how is it done? There are two cabinets in the GEO M6 category: the GEO M620 arrayable cabinet and the GEO M6B bass extension. The GEO M620 is a full-range unit for stand-alone, curved array or line array application. Extremely compact in size (191 by 373 by 260 mm) and

Opposite: The GEO M620 arrayable cabinet. Below: The new product can be rigged for a variety of live events; The GEO M6 in a hang of three; NEXO Sales Director, Denis Baudier; The GEO M6 is easily transportable.



lightweight (less than 10 kgs), the GEO M620 uses a NEXO-designed long-excursion high-efficiency 6.5-inch LF driver and one one-inch throat driver on a BEA / FEA optimised HR Wavesource, to deliver a frequency response of 80 Hz - 19 kHz +3dB, with nominal peak SPL of 127dB. HF dispersion is 80° or 120° horizontal, with 20° vertical coverage, 0° to 20° splay when arrayed. Using NEXO's HRW patented waveguide for optimum HF coupling between elements; the M620 performs in a variety of configurations, facilitated by a fully integrated three-point rigging system.

The GEO M6B is a low and mid-frequency extension box, for applications which demand more powerful reinforcement, such as live music. With one 6.5-inch eight ohm long-excursion driver, the M6B weighs just 7.6kgs and shares the same physical footprint as the M620, allowing the cabinets to be arrayed together in the same column. Featuring a flare-shaped port tube to increase low frequency efficiency and linearity at high power, the M6B offers a usable

range at -6dB of 70Hz - 1kHz.

Made out of lightweight polyurethane composite, the GEO M6 cabinets are available to order in any RAL colour designation. Highly cost-effective amplification is via NEXO's NXAMP4x1 TDcontroller; with three cabinets per channel, this means that just one amplifier can power a 12-cabinet system, and (optionally) be controlled over a Dante or Ethersound network.

GEO M620 loudspeakers can be used singly, in pairs, in curved arrays of three, in line arrays up to 12 cabinets long, depending on application and enabled by a range of simple accessories that allow flying, wall-mounting, pole-mounting and ground-stacking, pairing with any of NEXO's wide range of subbass cabinets to create a highly portable SR solution. GEO M6B bass extensions can be deployed inside a M620 line array, allowing the user to increase line array length for improved directivity control and output in the low-mid frequency range.

In its design brief, the GEO M6 extends beyond NEXO's traditional heartland of live music applications, towards the corporate AV sector and a wide range of fixed installation opportunities where speech reinforcement is the primary requirement. Target markets include theatre, conference facilities and auditoria, exhibition centres, function rooms, airports, shopping malls, attraction parks and all sizes of houses of worship.

NEXO Sales Director Denis Baudier told TPI: "The GEO M6 delivers many benefits to a rental house, making inventory extremely versatile and adaptable to different assignments. However, the design of this product also offers maximum potential in the permanent installation environment - whether it is a pair of M620's wall-mounted in a dynamic retail space, or 12 line-arrayed cabinets in a house of worship, the M6 has the aesthetic and performance characteristics to appeal to many different applications."

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