

flexible

coherent

efficient

compact



S805 VERTICAL TANGENT ARRAY MODULE

PRODUCT FEATURES

Optimized for use in vertical tangent arrays.

Integral high-precision array assembly system.

High power, long excursion neodymium 8 inch woofer delivers full range output from compact enclosures.

Very light weight (10.5 kg with Array Assembly System) allows GEO tangent arrays to be hung almost anywhere.

Hyperboloid Reflective Wavesource allows the S830 and the 5° S805 to be arrayed tangentially

Directivity Phase Device enhances line source coupling in vertical arrays.

Configurable Directivity Device allows dispersion in the non-coupling plane to be changed from 120° to 80°.

GEO S SERIES APPLICATIONS

Mobile or installed sound reinforcement for arenas, clubs, A/V, theater and themed attractions.

High output paging applications for large public spaces: transport hubs, outdoor venues, theme parks, etc.

GEO Tangent Array Modules can be used in horizontal or vertical arrays, with or without the CD12 Controlled Directivity Subbass



406mm
16"

GEO S Series Tangent Array Modules

➤ S805 Vertical

S830 Horizontal/Vertical

CD12 Hypercardioid Subbass

The GEO S805 is a compact, high output array module designed for use in vertical tangent arrays. The Hyperboloid Reflective Wavesource allows multiple GEO loudspeakers to radiate tangent wavefronts with coherent output. The 5° wavesource is optimized for the construction of curved vertical arrays that deliver equal power to equal coverage areas for consistent SPL from front to rear of the audience area.

The GEO S Series is the result of a three year intensive R&D project that has produced three fundamental patent applications in loudspeaker technology. The performance advantages produced by GEO innovations are easily measurable and clearly audible. With two full range tangent array modules and a hypercardioid subbass, the S Series offers total flexibility to design and deploy horizontal or vertical tangent arrays with coherent output. From high-definition musical reproduction to high output paging systems, GEO Technology delivers optimal performance in venues of all shapes and sizes.



NX241 Digital TDC Controller



INNOVATE

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S805 VERTICAL TANGENT ARRAY MODULE

PRODUCT FEATURES

Components:	LF	1x 8" (20cm) Neodymium Hi-flux 16 Ohm Driver
	HF:	1x 1" Throat Neodymium Driver on a Hyperboloid Reflective Wavesource
Height x Width x Depth		406 x 250 x 219 mm (16" x 9 7/8" x 5 5/8")
Shape		5° Trapezoid
Weight:	Net	10.5 kg (23 lbs)
Connectors		2x NL4MP SPEAKON 4 pole (In & Through)
Construction		Baltic Birch Ply finish with structured black coating. Dark grey carpet finish also available.
Fittings:	Grill	Perforated Steel
	Flying	Integral flying system. Intercabinet Angle Adjustments = .31° to 5° (logarithmic steps), 17.5° & 30°

SYSTEM SPECIFICATIONS GEO S805 with NX241 TDController

Frequency Response [a]		67 Hz – 19 kHz ± 3 dB
Usable Range @-6dB [a]		60 Hz – 20 kHz
Sensitivity 1W @ 1m [b]		99 dB SPL Nominal -97 dB SPL Wideband
Peak SPL @ 1m [b]		125 to 128 dB Peak for a single cabinet. Configuration dependant when arrayed [d].
Dispersion [c]	Coupling Plane:	Not useable as a single cabinet. Configuration dependant [d].
	Non-Coupling Plane:	120° (configurable to 80°).
Directivity Index [c]		Not useable as a single cabinet. Configuration dependant [d].
Crossover Frequency		1.8 kHz Passive
Nominal Impedance		16 ohms
Recommended Amplifiers		1500 to 3000 Watts into 4 ohms / 4 cabinets per channel. Up to 6 cabinets per channel may be connected to large amplifiers capable of operating into low impedance loads.

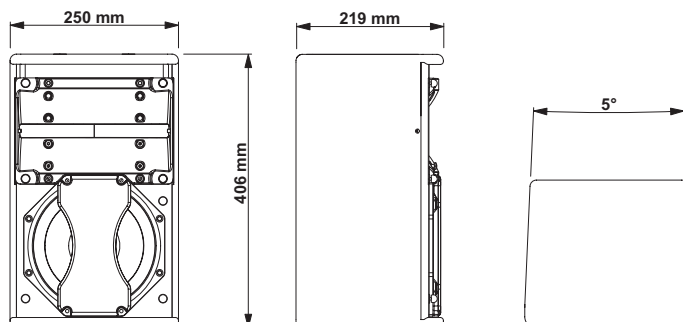
SYSTEM OPERATION

Electronic Controller	The NX241 Digital TDController presets are precisely matched to the GEO S8-Series cabinets and include sophisticated protection systems. Using GEO S8-Series cabinets without a properly connected NX241 Digital TDController will result in poor sound quality and can damage components. The GEO S805 & S830 can be used without the optional CD12 Hypercardioid Sub. In this case the NX241 can be used in stereo. With the CD12 Hypercardioid Sub each Sub channel requires two NX241 outputs and the NX241 will operate in mono.
HF Dispersion Configuration	After quick release of the front grill from its fittings, the HF Waveguide can be configured for 80° or 120° dispersion in the non-coupling plane.
Array Design	S805 and S830 cabinets, having tangent waveguides, can be mixed in the same array. Minimum configuration for Vertical Tangent Arrays is 5x S805 & 1x S830 (4x S805 for paging applications only). CD12's are optional: a ratio of 1 CD12 per 3 full range GEO modules is required for proper subbass output.
Speaker Cables	The GEO S805 and S830 are wired 1- & 1+ on both Speakon connectors, 2- & 2+ are not connected.
Rigging System	Please refer to the GEO User Manual before any operation.

SHIPPING & ORDERING

Packaging	S805s are packaged in pairs.
Shipping Weight & Volume	2x S805s: 29.2 kg (64.2 lbs) 0.135 cu m (4.8 cu ft)

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice.
 [a] Response Curves and Data: Anechoic Far Field above 200 Hz, Half-space Anechoic below 200 Hz. Usable Range Data: Frequency Response Capability with TD crossover slopes removed.
 [b] Sensitivity & Peak SPL: will depend on spectral distribution. Measured with band limited Pink Noise. Refers to the specified +/- 3 dB range. Data are for Speaker + Processor + recommended amplifier combinations.
 [c] Directivity Curves and Data: 1/3 octave smoothed frequency response, normalized to On-Axis response. Data obtained by computer processing of offaxis response curves.
 [d] Please refer to the GEO User Manual.



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LIMITED WARRANTY

Nexo loudspeakers and electronics are covered against defects in workmanship or materials for a period of two (2) years from the original date of purchase. At the option of Nexo, the defective item will be repaired/replaced with no charge for materials/labor. The item is to be adequately packaged and dispatched, pre-paid, to a Nexo authorized distributor/service center. Unauthorized repair shall void the warranty. This Nexo warranty does not cover cosmetics or finish and does not apply to any items which in Nexo's opinion have failed due to user abuse, accidents, modifications or any type of misuse.