

flexible

coherent

efficient

compact



## CD12 CONTROLLED DIRECTIVITY SUBBASS

### PRODUCT FEATURES

Unique directional subbass with hypercardioid pattern keeps subbass energy away from open microphones.

120° x 120° dispersion, usable output from 39 Hz to 250 Hz.

Dual-ported 12 inch woofers fire in opposite directions and are wired in reverse polarity.

Requires NX241 Digital TDController and two amplifier channels: each woofer is processed individually.

Internally braced Baltic Birch cabinet minimizes in-band resonances.

Available in structured black coating or dark grey carpet covering.

Integrated flying system for use with curved vertical tangent arrays of GEO S Series modules.

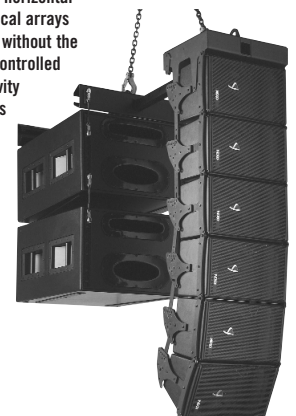
Cabinets designed for stable ground stacking

### GEO S SERIES APPLICATIONS

Mobile or installed sound reinforcement for arenas, clubs, A/V, theatre 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



400 mm  
15 3/4"

### GEO S Series Tangent Array Modules

S805  
Vertical

S830  
Horizontal/Vertical

► CD12  
Hypercardioid Subbass



NX241 Digital TDController

The compact CD12 uses an innovative approach to the control of long wavelength low frequency acoustic energy. Sophisticated signal processing algorithms, individually applied to each of the dual-ported 12 inch woofers, produce substantial forward gain and more than 12 dB attenuation at the rear. The CD12 puts subbass energy where it is needed and keeps it away from open microphones and reverberant surfaces.

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.

**NEXO**  
I N N O V A T E

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**CD12 CONTROLLED DIRECTIVITY SUBBASS**

**NEXO** is a world leader in the design and manufacture of loudspeaker systems for sound reinforcement. Since 1979 we have pursued practical solutions by addressing problems at fundamental levels. Each new design is generated using proprietary computer simulation software. Extensive modeling and simulation of critical parameters enables us to translate conceptual breakthroughs into significant cost and performance gains.

NEXO's comprehensive line includes the breakthrough GEO Series, based on fundamental wavesource patents, the compact, versatile PS Series, the world standard Alpha System and the Alpha e Series. Loudspeakers, analogue and digital control electronics and amplification are all designed to deliver **Sonic Innovation That Works.**

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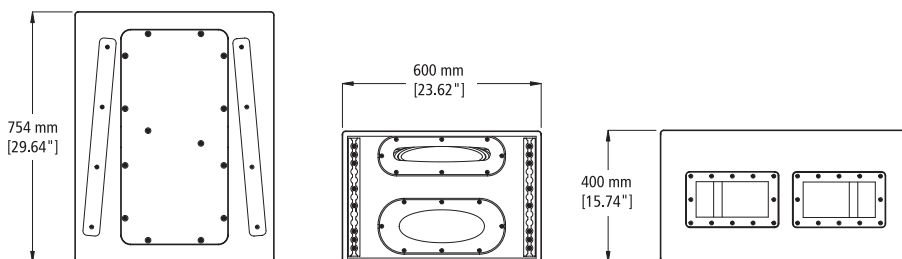
| PRODUCT FEATURES       |  |
|------------------------|--|
| Components             | 2x 12" (30cm) Long Excursion Neodymium 6 Ohm Driver  |
| Height x Width x Depth | 400 x 600 x 754 mm (15 3/4" x 23 5/8" x 29 11/16")   |
| Shape                  | Rectangular  |
| Weight:                | Net 36 kg (79 lbs)   |
| Connectors             | 2x NL4MP SPEAKON 4 pole (In & Through)   |
| Construction           | Baltic Birch Ply finish with structured black coating. Dark grey carpet finish also available. |
| Flying points          | Integral flying system.  |

| SYSTEM SPECIFICATIONS CD12 with NX241 TDController |  |
|--|--|
| Frequency Response [a]                             | 42 Hz – 200 Hz ± 3 dB  |
| Usable Range @-6dB                                 | [a] 39 Hz – 250 Hz   |
| Sensitivity 1W @ 1m                                | [b] 102 dB SPL Nominal   |
| Peak SPL @ 1m [b]                                  | 131 to 134 dB Peak (500 to 1200W RMS Amp)  |
| Dispersion [c]                                     | Hypercardioid pattern 120° x 120° over the entire useable bandwidth. Directivity Control is achieved throughDSP algorithms in the NX241 Digital TDController (two channels of the NX241 are used for the process). |
| Directivity Index [c]                              | Q = 3.773 DI = 5.7 dB over the entire useable bandwidth.   |
| Crossover Frequency                                | 150 Hz Active through NX241 Digital TDController   |
| Nominal Impedance                                  | 2x 6 Ohms  |
| Recommended Amplifiers                             | 2 amplifier channels are required for Hypercardioid operation, each rated at 1500 to 3000 Watts into 4 Ohmsper channel. Up to 2 complete CD12s per channel may be connected to a two channel amplifier.            |

| 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. |
| Subbass               | 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.   |
| Speaker Cables        | The front loudspeaker of the CD12 is wired 2+ & 2- while the rear loudspeaker is wired 1- & 1+. The CD12 must use separate cables to the GEO S805/S830.  |
| Rigging System        | Please refer to the GEO User Manual before any operation.  |

| SHIPPING & ORDERING      |  |
|--------------------------|--|
| Packaging                | CD12s are packaged individually. Minimum configuration for GEO Vertical Tangent Arrays is 5x S805 & 1x S830 (4x S805 for paging applications only). CD12's are optional: but a ratio of 1 CD12 per 3 full range GEO modules is required for proper subbass output. |
| Shipping Weight & Volume | 1 x CD12 = 42.35 kg (93.4 lbs), 0.29 cu m (10.2 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 off-axis response curves.  
 [d] Please refer to the GEO User Manual.



**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.