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INNOVATE

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NEXO's PS Series incorporates breakthrough designs in both asymmetrical constant directivity horns and integrated electronics. The results are three scaleable and easily configured systems, which provide exceptional performance in any application where small, high output, linear response loudspeakers are required.

UNCOMPROMISING ENGINEERING, ATTENTION TO DETAIL

NEXO S.A.

Now in its fourth decade, NEXO's company mission is to provide wide-ranging solutions that enhance the science, art and commerce of sound reinforcement. Founded by Michael Johnson, NEXO's Managing Director, and Chairman/R&D Director Eric Vincenot, NEXO became a publicly traded company in May 2001. NEXO shares are listed on the Marche Libre of the Paris Bourse (SICOVAM 4441).

The added access to capital markets gained by this public offering strengthened NEXO's ability to pursue aggressively genuine audio innovations. The first of these advanced audio design options is the widely heralded GEO Tangent technology, which incorporates several fundamental wave-source patents.

NEXO's sound reinforcement systems also include the compact, versatile PS Series plus the high performance Alpha System and Alpha^{e} Series. In short, all NEXO loudspeakers, analogue and digital controllers, power amplification, and advanced rigging systems are designed to deliver: Sonic Innovation That Works. NEXO is a world leader in the design and manufacture of loudspeaker systems for sound reinforcement.

PS Series systems can be used as floor monitors or stand-mounted main PA speakers, or flown as side and rear fill coverage speakers with GEO and Alpha System. PS systems can be installed vertically or horizontally as main PA or distributed/fill coverage speakers. Our attention to the smallest sonic detail, no matter your intended application, makes the PS Series Systems the perfect sound reinforcement solution.

INTEGRATED SYSTEM SPECIALISTS

Since the 1970s, NEXO has been a global leader in research and development of loudspeaker and complete sound reinforcement systems. Our expertise focuses on integrated signal processing, intelligent amplification, innovative transducer and waveguide designs, enclosure materials and hardware. While audio components designed in isolation may individually achieve high performance, making them work together often requires time-consuming setup and delicate adjustments. This is why we engineer all PS system elements to function as an ensemble, where the whole is even greater than the sum of exceptional parts. The results yield unsurpassed performance and reliability.

We apply specialized test and measurement tools along with unique ideas to the challenges of sound reinforcement, creating a range of systems that are simple and easy to use, while satisfying the most critical listeners.

Servo-controlled signal processing driven by amplifier output monitoring is a central element of NEXO systems. VCAs and VCEQs instantaneously respond to amplifier voltage and current via multiple time constants and signal integration algorithms that model multiple electroacoustic complexities including voice coil temperature and power compression. TDcontrollers (TD=Temperature Displacement) also apply internal models of transducer characteristics as failsafe protection. Whether analogue, or digital, our advanced loudspeaker system processors insure accurate reproduction at extreme output levels.

Above: Laser scanning equipment helps evaluate cone transducers such as the neodymium PS8 woofer.

Figure #1: In this conventional FOH configuration, the PS Series loudspeaker yields 50° horizontal coverage at 25° above the centreline, expanding to 100° horizontal coverage at 30° below the centreline, so that coverage widens with distance.

Figure #2: In stage monitor mode, with horn rotated 180° from Figure #1, the PS loudspeaker displays 100° horizontal coverage at 30° above the centreline and narrows to 50° horizontal coverage, at 25° below the centreline.

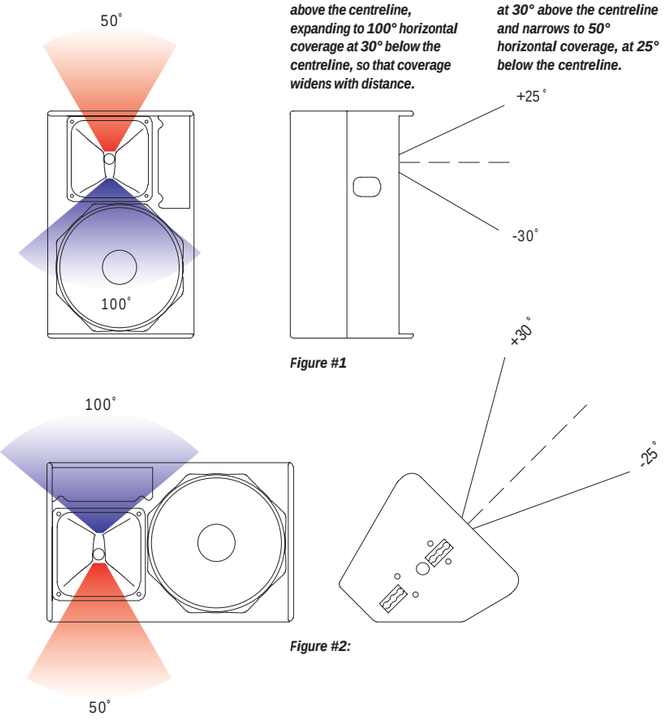


Figure #1

Figure #2:

THE ASYMMETRICAL ADVANTAGE

NEXO PS Series' exceptional performance is achieved by advanced system integration and anchored by our Asymmetrical Dispersion Constant Directivity horn design. As the signature physical design feature in PS systems, our asymmetrical horns are engineered so that vertical coverage is narrower above horn axis (+25°) than below (-30°), while horizontal coverage is narrower above horn axis (50° Horizontal for +25° Vertical) and wider below (100° Horizontal for -30° Vertical). (see Figures #1 and #2)

The obvious sonic benefits to this asymmetrical coverage are that, when properly used, PS systems significantly reduce the amount of ambient, reverberant energy caused when loudspeakers misdirect their output towards walls and ceilings. In practice, this means that PS Series asymmetrical horns allow users to directly focus more loudspeaker output on the audience, or performers (in monitor applications), and less loudspeaker output everywhere else.

A sticker on the wide dispersion side of the PS horn indicates the correct orientation for Front of House (FOH) and wedge monitoring applications. (see figures on pg #2) The arrow indicates the "wide side" of PS horn dispersion. Users simply need to position the arrow so that it points in the direction needing widest coverage and away from the direction needing the narrowest coverage.

COVERAGE ACCORDING TO NEED

For mobile system designs, our asymmetrical horn design allows users to quickly change horn coverage according to need. The specific dispersion of PS8, PS10 & PS15 horns can be seen on Figure #1 ("FOH" configuration). Access to any PS horn for inspection and configuration is easily made by removing the front grille with a gentle pull on the sides of the grille to disconnect the press-stud fixings. To modify horn orientation, remove the four Allen 4 metric or TORX TX25 screws (depending on model and age of the cabinet) that secure the horn.

Figure #2: (Above) With horn rotated 180° from Figure #1, this monitor application provides a wide (100°) sweet spot for the performer's listening zones, and restricts unwanted below-the-belt coverage.

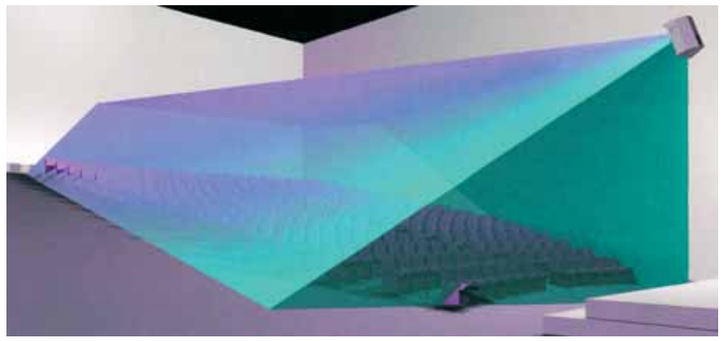


Figure #1: (Above) Computer representation of how the PS Series' asymmetrical horns match pattern control to the seating area of a typical rectangular venue.

FRONT-OF-HOUSE CONFIGURATION

Good coverage of audiences often requires a conflicting combination of wide coverage ("short-throw") for the closest listeners (below cabinet axis) and narrow coverage ("long-throw") for distant areas (on or above axis). The PS Series horizontal horn coverage varies from "short-throw" to "long-throw" along the vertical axis to match precisely these practical single system requirements. In most applications, asymmetrical horns should be used with the "wide" dispersion side directed towards the floor (as referenced by the arrow), but any of the four various horn orientations are usable, depending on venue geometry and room acoustics (see Figure #1).

STAGE MONITORS

For stage monitors, the best coverage must be wider when performers are closest to the wedge, and above the horn axis, than when they move away from the wedge and below the horn axis (see Figure #2). The flexibility to be deployed in this manner is one major reason why PS Series loudspeakers are widely used in floor monitor applications.

In this configuration, the PS horn must be rotated so that its "wide side" dispersion is in "wedge" position and that the directional arrow is pointed towards the top of the horizontally-oriented cabinet. This monitor-friendly dispersion combines with the PS Series' exceptional power handling to yield unrivalled foldback/monitor performance.

Photo #1: The PS8 TDcontroller

PS SERIES TD CONTROLLERS

Equalization and Subsonic/VHF Filtering

Because all PS cabinets are acoustically designed for maximum efficiency, each TD Controller applies strategic equalization corrections to insure proper tonal balance and system response. This active equalization also extends PS Systems' bandwidth, especially at low frequencies where acoustical output is limited by cabinet size. Active, rather than passive, attenuation allows amplifier voltages to be lowered for a specific output SPL, and functionally increase the maximum possible SPL from any PS amplifier.

Low and high-pass filters are used to remove signals out of the usable frequency range, eliminating sub and ultra-sonic components that could potentially degrade the performance of the Controller and amplifiers. These filters are optimized to realize the overall target system response.

PS/LSub Crossover and Servo Control

From input signals summed together, the resulting mono signal is low-pass filtered to feed the Sub-bass channel. When the channel configuration is set to Xover, the L&R main channel's high-pass filters are switched to bandpass (filter) signal components below the crossover frequency. Slopes and other filter characteristics are optimized using techniques optimized for the each driver's specific acoustical data.

VCAS, VCEQS AND AMPLIFIERS

Each of the three Audio channels (Left, Right and Sub-bass) contains two voltage-controlled elements driven by servo signals. The PS8Amp and PS10Amp are power amplifiers tailored for PS8 and PS10 systems and their respective LS400 & LS500 sub-bass requirements.

The identical structure and power ofthese 3RU devices offers two or three-channel instantaneous configuration via front-panel switch, allowing 3-way use with the appropriate NEXO SubBass or a wideband (2-way) configuration.

Power delivered by the amplifier is thus optimized for the proper configuration. All connections and controls are located on the front panel including mains fuses and voltage selection. Speaker wiring of each cabinet is automatically re-assigned.

PS SERIES RIGGING AND FLYING

PS8, PS10 and PS15 have a built-in 35mm (1 3/8in) diameter stand adapter. Cabinets can be positioned directly on a general-purpose speaker stand or mast inserted in top-fitted stand adapters on LS400, LS500 & LS1200 models. A U-Coupler accessory allows relative rotation of two side-by-side cabinets on top of the mast or on a speaker stand. PS8 and PS10 mast and U-couplers are optional. For safety reasons, U-coupler use is not recommended with PS15 cabinets (see Figures #1, & #2).

PS10 & PS15 FLYING RAILS & RINGS

PS10s and PS15s ship with steel anchor plates intended for these optional fittings:

- Top: 6-position aircraft-flying rail. (9 for PS15)
- Bottom: Twin single-position round aircraft flying rails, or two 3-position aircraft flying rails for the PS15. These rails are supplied with optional flying kits containing all necessary screws and four single stud aircraft flying rings. Heavy-duty double stud flying rings can be used in all rails except on the PS10 bottom. Vertical orientation of cabinets is a function of top-rail ring position. For safety reasons two rings must be linked, per rail, to two independently fixed straps.

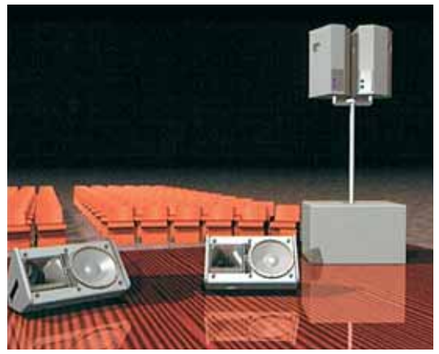


Figure #1(left): PS Series stage rigging facing Front of House.

Figure #2 (below left): PS Series rigging from the Performer's perspective.

PS10 OMNIMOUNT® STYLE CLAMPS

The back and bottom of the PS10 is equipped with internal M8 metric anchor points for Omnimount100 Series standard spacing. This is particularly convenient for permanently installed cabinets. Original screw removal requires a N°4 metric Allen key/TORX25.

PS8 ACCESSORIES

There are three PS8 mounting accessories. The FS0081-001 is intended for direct mounting onto the PS8 cabinet surface. It provides two M10 captive nuts that allow these three accessories to be fitted:

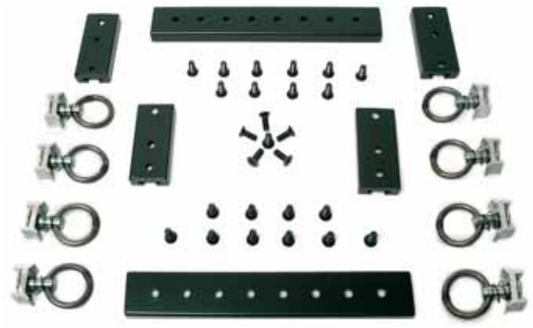
- Standard lighting hook/CLAMP
- M10 lifting eye bolt
- DIN Pivot (TV spigot)

The FS0081-002, which must be used with the FS0081-001, provides two welded M5 nuts and one welded M10 nut. This adapter allows the cabinet to be fixed on the wall, ceiling, or on a stand using the FS0081-003.

The FS0081-003 allows for Horizontal Cabinet mounting on a stand or a 35mm mast. It can be used with other accessories or fitted directly to the cabinet.

***Photo #2 (Above left): Installed, flown** PS10 Loudspeaker*

Photo #3 (right): The PS15 (accessory) rigging kit, part # FLYPS15



PS8 LOUDSPEAKER

PS8 Loudspeakers are magnetically shielded and feature advanced NEXO-designed Neodymium drivers. As such, the PS8 is extremely light and compact, and popular with professional's for use with magnetically sensitive professional video or computer equipment. The dispersion, architecture and weight balance of the PS8 Loudspeaker are designed to provide exceptional PA/stage monitor performance from a single product without compromise. Background and foreground music playback applications are equally well-served by the PS8 system.

PS8 SYSTEM APPLICATIONS

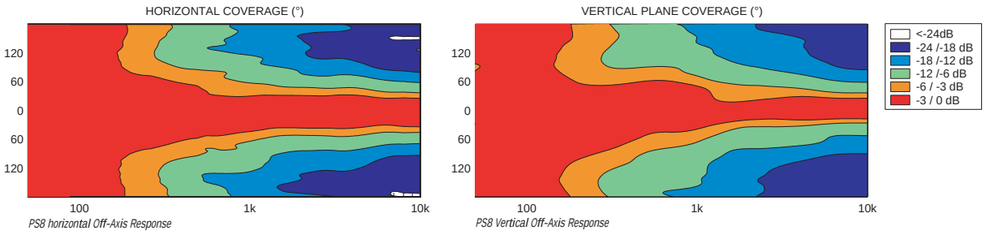
- *Installed PA for clubs, A/V, theatre, broadcast, Houses of Worship, theme parks, etc.*
- *High-quality, low-profile stage monitoring for clubs, A/V, theatre, broadcast, etc.*
- *Near-field, down-fill and under-balcony systems in support of larger, touring NEXO PS/Alpha systems.*
- *Foreground and background music source for retail establishments seeking audio with impact.*
- *Anywhere powerful, high-quality performance is required adjacent to magnetically-sensitive video equipment.*

PRODUCT FEATURES

- *High-power system (125dB Peak SPL @ 1m) with new 8in LF and 1in HF low magnetic emission Neodymium drivers for light weight (7.5kg, 16.5lbs) and negligible magnetic leakage.*
- *Rotatable, asymmetrical horn and unique cabinet architecture ensure versatility; user-adaptable for both PA and stage monitoring applications.*
- *Two-way passive 8Ω design uses a single amplifier channel for simpler installation and lower cost.*
- *Sophisticated control electronics ensure reliable, linear operation. Supported with a full range of mounting and flying accessories.*

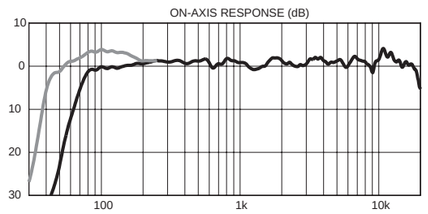
This flexibility is realized by a proprietary constant directivity asymmetrical dispersion horn, easily configurable (by users) in four positions by 90° rotations. Coupled with the horn's unique progressive horizontal (50° to 100°) and vertical (55°) dispersion, the most suitable pattern can be selected for vertical or horizontal PA usage or wedge monitoring. The PS8's 2-way passive 8Ω design employs a single amplifier channel to deliver bi-amped performance for less money, space and complexity.

The PS8 Loudspeaker System is the smallest member of NEXO's acclaimed PS Series. Versatile and compact, while offering full-range output, PS8 loudspeakers are tailored for a wide range of touring and fixed sound reinforcement applications. Like all NEXO products, the PS8 Loudspeaker, and optional LS400 Subwoofer, are designed to work with advanced electronic processors, guaranteeing the highest standards of consistent performance and reliability.

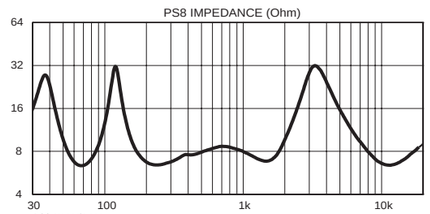


PS8 horizontal Off-Axis Response

PS8 Vertical Off-Axis Response



On-Axis Responses PS8 & PS8 + LS400.

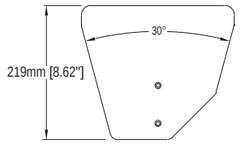


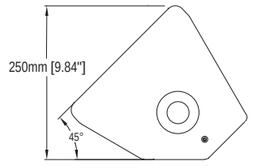
PS8 Impedance

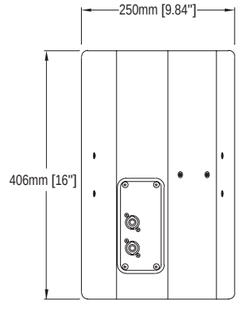
NEXO PS8 SYSTEM

- PS8 Loudspeaker
- LS400 Sub-Bass
- PS8 TDcontroller
- PS8 Amplifier

PS8 system's compact size, exceptional sound and reconfigurable, asymmetrical horn make it the perfect solution for nearly every nearfield application.







PS8 LOUDSPEAKER PRODUCT FEATURES	
Components	LF 1x 8" (20cm) Shielded Neodymium 8Ω driver HF 1x 1" Shielded Neodymium throat driver + Low Distortion, Constant Directivity Asymmetrical Dispersion Horn.
Height x Width x Depth	406 x 250 x 219mm (16"x 97/8"x 55/8")
Weight	7.5kg(16.5lbs)
Connectors	2x NL4MP 4-pole SPEAKON
Construction	Baltic Birch Ply finished with textured, polyurethane black coating
Fittings	Handles - Front finish: Perforated steel grille Flying Points & Fixed Installation Threaded inserts are fitted as standard to all cabinet surfaces for connection of mounting accessories
Stand fittings	Built-in Stand Fitting, 35mm(1"3/8)
SYSTEM SPECIFICATIONS PS8 with PS8 TDcontroller	
Frequency Response [a]	69Hz - 19kHz ±3dB (43Hz - 19kHz ±3dB with LS400 Subwoofer)
Usable Range @-6dB [a]	62Hz – 20kHz (40Hz – 20kHz with LS400 Subwoofer)
Sensitivity 1W @ 1m [b]	96dB SPL Nominal - 94dB SPL Wideband
Nominal Peak SPL @ 1m [b]	122 to 125dB Peak (for 200 to 500W RMS Amp.)
HF Dispersion [c]	50° to 100° Hor. x 55° Vert. Rotatable Horn, 4 positions
Directivity	Q & DI [c] Q : 10 Nominal DI : 10dB Nominal (f > 1.8kHz)
Crossover Frequencies	2.5kHz Passive
Nominal Impedance	8Ω
Recommended Amplifiers	200 to 500Watts into 8Ω for 1x PS8; 400 to 1000Watts into 4Ω for 2x PS8 per channel
SYSTEM OPERATION	
Electronic Controller	The PS8 Loudspeaker must be used with a NEXO Controller (PS8 TD analogue, NX242 digital or PS8AMP integrated power amplifier). Use without a properly-connected Controller will result in poor sound quality and may damage the components.
Dispersion configuration	After removing the quick-release front grille, the HF Horn can be rotated to one of 4 positions for dispersion configuration.
Sub-bass	The PS8 Loudspeaker can be used with or without the optional LS400 Subwoofer. Active two-way operation with the LS400 is included in the PS8TD, NX242 or PS8AMP. One LS400 matches 2 x PS8, additional LS400 may be used for enhanced effect.
Speaker Cables	The PS8 is wired 2- & 2+ on Speakon connectors, LS400 on 1- & 1+. Loop through Speakons are present on both products. Single identical cables can thus be used to loop through combinations of up to 2x PS8 & 1 x LS400 in no particular order.
SHIPPING & ORDERING	
Packaging	PS8s are packaged as pairs with or without PS8 TDcontroller in a single box.
Shipping Weight & Volume	2x PS.8U = 16kg(35.3lbs) 0.109cu m (3.85cu ft). 2x PS.8U + 1x PS.8UTD = 19kg (6.61lbs) 0.109cu m (3.85cu ft).
Accessories: A full selection of mounting accessories is available, please contact your Nexo Agent for details.	

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice. [a] Response curves & data : Anechoic Far Field above 300Hz, Half-Space radiation below 300Hz. [b] Sensitivity & Peak SPL data : these will depend on spectral distribution and crest factor of program material. Measured with band limited Pink Noise. Nominal refers to Voice Decade (300Hz - 3kHz), Wideband to the specified ±3dB range. Data are for speaker + processor + recommended amplifier combinations. Peak SPL is at clipping of recommended amplifier. [c] Directivity curves & data : obtained by computer treatment on off axis response curves.

PS8 ARCHITECT & ENGINEERING SPECIFICATIONS

The 2-way full range loudspeaker system shall have one 8" shielded, neodymium cone transducer and a 1"-exit shielded neodymium driver on a low distortion constant directivity asymmetrical dispersion horn. Horizontal dispersion shall range from 50° to 100° and vertical dispersion shall be +25°/-30°. Users shall be able to rotate the horn in 4x directions, in 90° increments, as required by the application. The system shall have a Q of 10 and a Directivity Index of 10dB (nominal) at frequencies above 1.8kHz. The system shall have a nominal sensitivity of 96dB (94dB wideband). When driven by a NEXO PS8AMP, or by a NEXO PS8 TDcontroller properly connected to amplification capable of delivering 200 to 500Watts into an 8ø load, the system shall produce 122 to 125dB peak SPL with a frequency response of 69Hz to 19kHz ±3dB (62Hz to 2kHz ±6dB). The system shall have an internal passive crossover. Electrical connections shall be made via 2x SPEAKON NL4MP 4-pole connectors.The system shall weigh 7.5kg(16.5lbs), have a tuned ported multi-angle enclosure constructed of 18ply Baltic birch and be finished in structured black coating with exterior dimensions no greater than 406mmH x 250mmW x 219mmD (159.8" x 98.4" x 86.2"). Exterior hardware shall include 3x threaded mounting points (2x on top, 1x on bottom), 6x threaded mounting points on sides, and 1-pole socket. Interior components shall be protected by a powder coated perforated steel grille. The full range system shall be the NEXO PS8 with a NEXO PS8 TDcontroller, or NEXO NX242 Digital TDcontroller, or a NEXO PS8AMP. Other integrated loudspeaker/controller systems shall be acceptable, provided independent laboratory test results verify these specifications are equalled or exceeded.

PRODUCT FEATURES

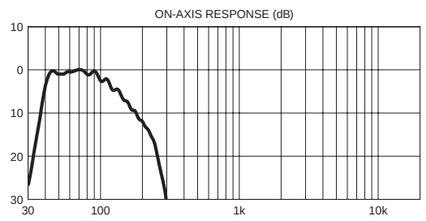
■ *High-power system (131dB Peak SPL @ 1m) with 12in VLF low magnetic emission Neodymium driver for light weight (14.6kg, 32lbs) and negligible magnetic leakage.*
■ *VLF extension (to 40Hz) of PS8 Loudspeakers. Sophisticated control electronics ensure reliable, linear operation.*
■ *Integral pole mount that supports one or two PS8 Loudspeakers.*

LS400 SUB-BASS

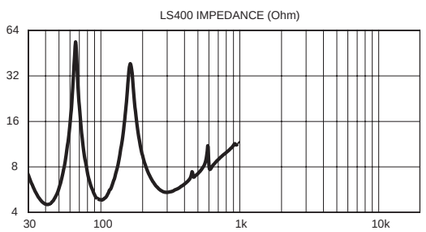
The LS400 Sub-Bass extends the usable range of the PS8 Loudspeaker to 40Hz, providing high performance and high power output (131dB Peak) in an extremely compact, light weight package. The NEXO-designed shielded 12in Neodymium driver allows the LS400 to be used in close proximity to magnetically sensitive video equipment.
One LS400 is typically used with two PS8 loudspeakers, additional units may be used for an enhanced LF impact. The PS8 TDcontroller's integral sub section and combined signal (PS8 and LS400) SPEAKON wiring ensure cost-effective and simple system implementation.

NEXO PS8 SYSTEM
PS8 Loudspeaker
› LS400 Sub-Bass
PS8 TDcontroller
PS8 Amplifier

PS8 system's compact size, exceptional sound and reconfigurable, asymmetrical horn make it the perfect solution for nearly every nearfield application.



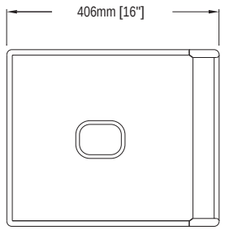
LS400 On-Axis Response

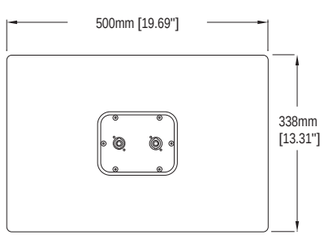


LS400 Impedance

PS8 SYSTEM APPLICATIONS

■ *Installed PA for clubs, A/V, theatre, broadcast, Houses of Worship, theme parks, etc.*
■ *High-quality, low-profile stage monitoring for clubs, A/V, theatre, broadcast, etc.*
■ *Near-field, down-fill and under-balcony systems in support of larger, touring NEXO PS/Alpha systems.*
■ *Foreground and background music source for retail establishments seeking audio with impact.*
■ *Anywhere powerful, high-quality performance is required adjacent to magnetically-sensitive video equipment.*





L400 SUB-BASS PRODUCT FEATURES	
Components	VLF 1 x 12" (30cm) Shielded Neodymium long excursion 6Ω driver
Height x Width x Depth	338 x 500 x 406mm (13 1/4"x 19 5/8"x 16")
Weight	14.6kg (32 lbs) net
Connectors	2x NL4MP 4-pole SPEAKON
Construction	Baltic Birch Ply & textured, polyurethane black coating
Fittings	Handles 2, integral to cabinet
Stand fittings	Internal Stand Fitting on Top (35mm, 1"3/8) accepts a mast supporting 1 or 2 PS8s.
SYSTEM SPECIFICATIONS LS400 with PS8 TDController	
Frequency Response [a]	43 Hz - 120 Hz ±3dB
Usable Range @-6dB [a]	40 Hz - 140 Hz
Sensitivity 1W @ 1m [b]	99 dB SPL Nominal
Nominal Peak SPL @ 1m [b]	128 to 131dB Peak (300 to 700W RMS Amp.)
Crossover Frequencies	120Hz Active through PS8TD
Nominal Impedance	6Ω
Recommended Amplifiers	300 to 700Watts into 4Ω
SYSTEM OPERATION	
Electronic Controller	The LS400 Sub-Bass must be used with a Nexo Controller (PS8 TD analogue, NX241 digital or PS8AMP integrated power amplifier). Use without a properly connected Controller will result in poor sound quality and may damage the components.
Sub-bass	The LS400 Sub-Bass provides optional VLF extension for PS8 Loudspeakers. Active two-way operation with the PS8 is included in the PS8TD, NX241 or PS8AMP. One LS400 matches 2x PS8, additional LS400 may be used for enhanced effect.
Speaker Cables	The PS8 is wired 2- & 2+ on Speakon connectors, LS400 on 1- & 1+. Loop through Speakons are present on both products. Single identical cables can thus be used to loop through combinations of up to 2x PS8 & 1x LS400 in no particular order.
SHIPPING & ORDERING	
Packaging	LS400s are sold as single items or multiples thereof.
Shipping	Weight & Volume 1x LS.400 = 17.1kg(38 lbs) 0.130cu m (4.59 cu ft)

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice. [a] Response curves & data: Half-Space radiation. [b] Sensitivity & Peak SPL data: These depend on spectral distribution and crest factor of program material. Measured with band limited Pink Noise. Nominal refers to (50Hz-200Hz), Wideband to the specified ±3dB range. Data are for speaker + processor + recommended amplifier combinations. Peak SPL is at clipping of recommended amplifier.

LS400 ARCHITECT & ENGINEERING SPECIFICATIONS

The subbass loudspeaker system shall have one shielded 12" VLF, 6Ω long-excursion cone transducer. Nominal Sensitivity shall be 99dB. When driven by a NEXO PS8Amp or by a NEXO PS8 TDController properly connected to amplification capable of delivering 300 to 700 Watts into a 6Ω(nominal) load the system shall be capable of 128dB to 131dB peak SPL, with a frequency response of 43Hz to 120Hz ±3dB (40Hz to 140kHz ±6dB). The system shall include an active crossover. Electrical connections shall be made via two SPEAKON NL4MP 4-pole connectors.
The system shall the weigh 14.6kg(32.7lbs), have a tuned ported rectangular enclosure constructed of 18ply Baltic birch, finished in structured black coating with exterior dimensions no greater than 338mmH x 500mmW x 406mmD (13.3" x 19.7" x 16.0").
Exterior hardware shall include 1-pole socket. The system shall be the NEXO LS400 with a NEXO PS8Amp or a NEXO PS8 TDController. Other integrated loudspeaker/controller systems shall be acceptable, provided independent laboratory test results verify these specifications are equalled or exceeded.

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PS8AMP

The PS8AMP is a dedicated amplifier that allows PS8 Loudspeakers and optional LS400 Subwoofers to achieve exceptional performance from such compact packages. The integrated PS8 TDcontroller provides specifically optimised crossover, sensed-amplifier control and system equalization for PS8 and LS400 cabinets.
The PS8AMP has L and R inputs and three outputs, L, R and summed LSub out. The PS8AMP Configuration switch automatically configures the unit for 2-channel mode (LSub Off), where the PS8AMP drives two to four PS8 Loudspeakers in stereo (2x 850Watts/4Ω) or 3-channel mode (Lsub On), where the PS8 AMP drives two PS8 Loudspeakers in stereo (2x 430Watts/8Ω) and one LS400 Subwoofer (850W/4Ω) with a summed mono signal of L+R input signals.
Like all NEXO processors, the PS8AMP provides precision dynamic, voice coil temperature and diaphragm displacement protection through the application of selective Voltage Controlled Equalisers (VCEQs), reducing levels only at frequencies when and where necessary.

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PS8 AMPLIFIER PRODUCT SPECIFICATIONS

Power Rating	LSub Off, 2 channels: 2x 850W/4Ω (2x PS8 per channel) LSub On, 3 channels: 2x 430W/8Ω, 1x 850W/4Ω (1x PS8 per channel and 1x LS400)
S/N Ratio	-100dB
THD	< 0.05%
Damping Factor	>400:1
Slew Rate	25V/µS
Input Impedance	36kΩ (balanced)
Power Supply	115/230 VAC +/-10% 50/60Hz. Front panel selector.
Audio Inputs	2x L&R Audio inputs. Electronically balanced, 36kΩ. 2x XLR-3F connectors and two parallel XLR-3M.
Audio Outputs	2x NL4MP 4-pole SPEAKON connectors.
Controls	Stereo L/R Link, Level, LSub Level, Lsub On, Power On.
LED Indicators	Amp Signal, Amp Peak, Speaker Protect VLF, Speaker Protect LF
Speaker protect	HF, System Configuration.
Dimensions	3RU 19" Rack. 368mm (14.5") Depth
Weight	19kg(42lbs) net

SYSTEM OPERATION

Applicable Products	The PS8AMP is precisely matched to the PS8 & LS400 cabinets and includes the same sophisticated protection systems incorporated in the PS8 TDcontroller. Use of either product without a propery-connected AMP/Controller will result in poor sound quality and may damage the components.
LSub Off	In this mode, the PS8AMP is configured to drive two or four PS8s in stereo
LSub On	In this mode, the PS8AMP is configured to drive two PS8s in stereo and 1 LS400 with a summed mono signal of the L+R input signals.

SHIPPING & ORDERING

Packaging	PS8AMPs are sold as single items and multiples thereof.
Shipping Weight & Volume	1x PS8AMP = 19kg (42 lbs) 0.073cu m (2.59cu ft)

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice.

PS8AMP (AMPLIFIER/CONTROLLER) ARCHITECT & ENGINEERING SPECIFICATIONS

The power amplifier shall be of 2 or 3-channel with instantaneous configuration via front-panel switch, allowing 2-way, full bandwidth configuration or 3-way use with the appropriate subbass. The amplifier shall integrate all TDcontroller functions, including internal sense-connections and identical specifications of the stand-alone TDcontrollers, described on the page #11 of this brochure. Each balanced Line Input shall have a chaining male connector for operation of multiple PS8AMPs. Two SPEAKON NL4MP 4-pole connectors shall automatically configure and provide visual indication of wiring status. The unit shall have automatic configuration and servo-controlled VCEQs. The L&R link switch shall permit Mono wiring when independent PS8AMP stacks are used at stage L&R. Front panel LED indicators shall include Amp Signal, Amp Peak, Speaker Protect VLF, Speaker Protect LF, Speaker protect HF and System Configuration. A single PS LED shall light for each Stereo channel. Sub ON status shall indicate when three amplifier channels are in operation. The amplifier shall include a back-to-front, variable speed fan cooling, while all connections and controls shall be front panel-mounted including mains fuses and voltage selection. The slew rate of the amplifier shall exceed 25V/µS (stereo mode). The unit shall have two electronically balanced inputs with XLR-3F connectors at a 36kΩ (balanced) impedance, and 2x XLR-3M looping connectors. Damping factor shall be >400:1. Frequency response shall measure 20Hz to 20kHz, ±0.1dB at 1W into 8Ω per channel (stereo). In Sub ON mode, each PS8AMP shall provide 3x amplifier channels, with L&R channels producing 430W/8Ω, and 1x (sub) amplifier channel producing 850W/4Ω. In Sub OFF mode each stereo PS8AMP channel shall produce 850W/4Ω. System function shall always be stereophonic. In Sub OFF mode, the Sub amplifier channel shall be rerouted to the PS8s, so that 1700W output shall always be used by the PS system. Level control shall operate on all channels simultaneously, according to configuration. The amplifier shall have a steel chassis with 48.3cm(19in) EIA standard (RS-310-B) rack mounting dimensions. The 3RU amplifier shall weigh 19kg(41.9lbs) and be 368mm(14.5") deep. AC power requirements shall be 115/230VAC, ±10% at 50/60Hz. The amplifier shall be designated as the NEXO PS8AMP. Other integrated loudspeaker-amplifier/controllers shall be acceptable, provided independent laboratory test results verify these specifications are equalled or exceeded.

PS8 TDCONTROLLER

The PS8 TDcontroller is an advanced analogue processor that allows the PS8 Loudspeaker and optional LS400 Subwoofer to achieve superior performance from an exceptionally small format. The PS8 TD provides crossover, sensed amplifier control and system equalization, optimised for the PS8 and LS400. Each PS8 TD has two inputs and three outputs, L, R and summed sub out, minimising installation cost and complexity.
Like all NEXO processors, the PS8 TD provides precision dynamic, voice coil temperature and diaphragm displacement protection through the use of selective Voltage Controlled Equalisers (VCEQs), strategically reducing levels only at frequencies when and where necessary.

PRODUCT FEATURES

- *Precision circuits specifically engineered for the PS8/LS400 systems permit increased SPL and operational reliability.*
- *Servo-controlled VCEQs provide precise dynamic control without spectral imbalance.*
- *Two inputs and three outputs enable a single PS8 TD to manage multiple PS8 and LS400 products.*
- *Comprehensive status indicators and controls.*

PS8 TDCONTROLLER PRODUCT FEATURES

Audio Inputs	2x differential non floating L&R Audio inputs, 50kΩ. 2x XLR-3F connectors.
Sense Inputs	3x Amplifier Sense Inputs (PS8 L&R, LS400). 400kΩ. 6 Pole Removable Strip Terminal.
Audio Outputs	2x L&R PS8 Audio outputs. Balanced, non floating, 51Ω. Two XLR-3M. 1x Mono (L+R) LS400 Audio output. Balanced, non floating, 51Ω. One XLR-3M.
Controls	Gain switch (back panel), 3 positions : -6 / 0 /+6dB. Peak Limiter trimmer (600W-200W/8Ωs) Sub Overlap / Crossover switch & Sub Gain Control (-/+ 6dB).
Indicators	LF speakers Protect Yellow LED's (Temp. & Disp), Power ON (green), Amp Sense & Peak LED's (green/Red)
Dimensions	1RU 19" Rack. 165mm (6.5") Depth
Weight	2.9kg (6.6lbs) net

SPECIFICATIONS

Output Level	+22 /+16/+10dBm typ. into 600Ω load. Back Panel switch on +6/0/-6dB respectively.
Input Section	Maximum input Level : 22dBu. CMRR 90dB @ 1kHz typ.
THD+N	0.05% @ 1kHz Typ. for +10dBm Output.
Noisefloor	-90 /-96 /-100dBV for +6 /0 /-6dB switch position (22Hz - 22kHz, UnWeighted)
Dynamic Range	111dB UnWeighted (THD+N at-60dBr sine wave @1kHz rel.max. output)
Crosstalk	104dB
Filtering & EQ.	L&R: 12dB/oct Low Pass, 12dB/oct High pass (crossover or overlap), 4 Parameter EQs. All factory tuned.
Protections	VCA temp. (SUB,LF & LF), VCEQ disp. (SUB & LF), Peak Limiter (all chanels), Power compression regulation.
Power Supply	30-220 Volts (continuous operation), 50-60Hz. Power 9W. Peak Inrush current 0.5A. Earth-Lift.
Conformity	Comply with safety objective of 73/23/EEC & 89/336/EEC directives. (EN60065-1998, EN55103-1996) CB scheme, cULus certifications in progress.

SYSTEM OPERATION

Applicable Products	The PS8 TDcontroller is precisely matched to the PS8 & LS400 cabinets and includes sophisticated protection systems. Use of either product without a properly connected Controller will result in poor sound quality and may damage the components.
Sub-bass	Active two-way operation of the PS8 Loudspeaker with the LS400 Subwoofer is included in the PS8TD.

SHIPPING & ORDERING

Packaging	PS8TDs are packaged one per box and shipped singly or with a pair of PS8s.
Shipping	1x PS8TD = 3.4kg(7.5lbs) 0.02m3 (0.71cu ft)

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice.

PS8 TDCONTROLLER ARCHITECT & ENGINEERING SPECIFICATIONS

The PS8 TDcontroller shall be configurable from a combination of 2x inputs and 3x outputs with each output providing crossover, parametric EQ, adjustable peak limiter and Temperature & Displacement protection for NEXO PS8 and LS400 products. The unit shall have electronically balanced analogue inputs and outputs. All crossover, protection parameters, and EQ are factory optimized and can't be user-accessed. The controller must model the loudspeakers in real time and this modeling shall include loudspeaker temperature and displacement. Protection shall be selective, acoustically transparent and not allow PS8 loudspeakers to exceed speaker-dependent thresholds. The device shall have 3x inputs providing feedback from amplifier output to allow real time monitoring of amplifier voltage. Crossover function between PS8 loudspeakers and the LS400 Subwoofer shall be controlled by the PS8 TDcontroller. Maximum input shall be 22dBu with CMRR 90dB@1kHz and noise floor below -100dB for the 0dB rear-panel switch. A 3-position, rear-panel gain control switch shall be adjustable between -6/0/+6dB. The Output Section shall display +22/+16/+10dBm into 600Ω load with Rear Panel switch on +6/0/-6dB (respectively). LEDs shall indicate status for; Power ON (green), Amp Sense & Peak LED's (green/Red), Temperature & Displacement (yellow) and LS400 (VLF) displacement protection (also yellow). The chassis shall be constructed of steel with a black paint finish. Input power shall range from 110 to 220VAC continuously, 50-60Hz with a rear panel earth-lift. The 1RU controller shall weigh 2.9kg(6.4lbs), with exterior dimensions of 483mmW x 44mmH x 190mmD (19" x 1.75" x 7.5"). The chassis shall be constructed of steel with a black paint finish. The controller shall be the NEXO PS8 TDcontroller. Other integrated loudspeaker-controllers shall be acceptable, provided independent laboratory test results verify these specifications are equalled or exceeded.

PS10 LOUDSPEAKER

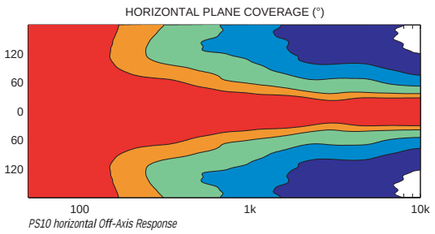
The PS10 Loudspeaker can be safely driven with over 500Watts of amplifier power, yet it is only half the weight and volume of common trapezoidal systems. The dispersion, architecture and weight balance of the PS10 Loudspeaker are designed to provide both exceptional PA and stage monitor performance from a single product without compromise. This flexibility is realized by a proprietary constant directivity asymmetrical dispersion horn, easily rotated in four positions by the user. Coupled with the horn's unique progressive horizontal (50° to 100°) and vertical (55°) dispersion, the most suitable pattern can be selected for vertical or horizontal PA usage, or switchable active wedge monitoring. The 8Ω, 2-way passive design requires a single amplifier channel to deliver bi-amped performance for less money, space and complexity.

PRODUCT FEATURES

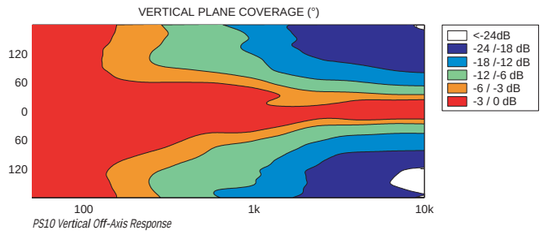
- *High-power system (127dB Peak SPL@1m) with 10in LF and 1in HF drivers.*
- *Rotatable asymmetrical horn and unique cabinet architecture ensure versatility*
- *User-adaptable for both PA and stage monitoring applications.*
- *Two-way passive 8Ω design uses a single amplifier channel for simpler installation and lower cost.*
- *Sophisticated control electronics ensure reliable, linear operation.*
- *Supported with a full range of mounting and flying accessories.*

PS10 SYSTEM APPLICATIONS

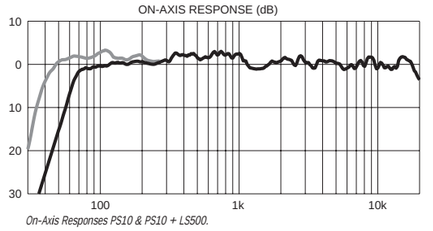
- *Touring, installed PA for clubs, A/V, theatre, broadcast, Houses of Worship, etc. High-quality stage monitoring for cabarets A/V, theatre, broadcast, etc.*
- *Fill-in system for use with larger NEXO PS/Alpha systems, or any application needing exceptional side, down and near-field augmentation.*



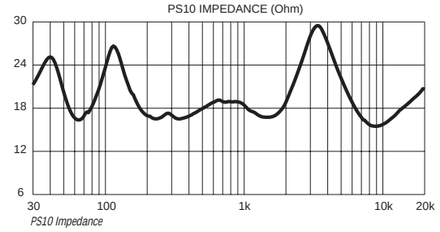
PS10 horizontal Off-Axis Response



PS10 Vertical Off-Axis Response



On-Axis Responses PS10 & PS10 + LS500.



PS10 Impedance

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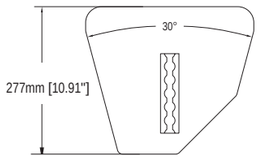
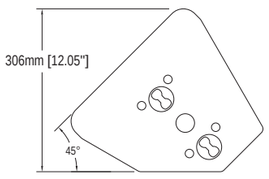
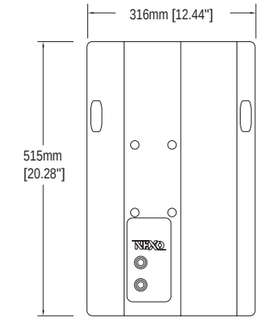
NEXO PS10 SYSTEM

- PS10 Loudspeaker
- LS500 Sub-Bass
- PS10 TDcontroller
- PS10 Amplifier

PS10's compact size, exceptional output and reconfigurable horn make it the perfect solution for nearly any application.







PS10 LOUDSPEAKER PRODUCT FEATURES	
Components	LF 1x 10" (25cm) 8Ω driver HF 1x 1" throat driver + Low Distortion, Constant Directivity Asymmetrical Dispersion Horn.
Height x Width x Depth	515 x 316 x 277mm (20.25" x 12.5" x 10.88")
Weight	15kg(33lbs)
Connectors	2x NL4MP 4-pole SPEAKON
Construction	Baltic Birch Ply finished with textured, polyurethane black coating
Fittings	Handles 2, integral to cabinet
Front finish	Acoustic foam on perforated steel grille (77% transparent)
Flying Points &	1x steel anchor point for flying track on top (6 positions)
Fixed Installation	2x steel anchor plates for flying track on bottom (1 position)
Stand fittings	Built in Stand Fitting, 35mm(1"3/8)
SYSTEM SPECIFICATIONS PS10 with PS10 TDcontroller	
Frequency Response [a]	65Hz - 20kHz ±3dB (40Hz - 20kHz ±3dB with LS500 Subwoofer)
Usable Range @-6dB [a]	58Hz - 21kHz (38Hz - 21kHz with LS500 Subwoofer)
Sensitivity 1W @ 1m [b]	98dB SPL Nominal - 96dB SPL Wideband
Nominal Peak SPL @ 1m [b]	124 to 127dB Peak (for 200 to 500W RMS Amp.)
HF Dispersion [c]	50° to 100° Hor. x 55° Vert. Rotatable Horn, 4 positions
Directivity	Q & DI [c] Q : 16 Nominal DI : 12dB Nominal (f > 3kHz)
Crossover Frequencies	2kHz Passive
Nominal Impedance	8Ω
Recommended Amplifiers	200 to 500Watts into 8Ω for 1x PS10; 400 to 1000Watts into 4Ω for 2x PS10 per channel
SYSTEM OPERATION	
Electronic Controller	The PS10 Loudspeaker must be used with a NEXO Controller (PS10 TD analogue, NX242 digital or PS10AMP integrated power amplifier). Use without a propery-connected Controller will result in poor sound quality and may damage the components.
Dispersion configuration	After removing the quick-release front grille, the HF Horn can be rotated to one of 4 positions for dispersion configuration.
Sub-bass	The PS10 Loudspeaker can be used with or without the optional LS500 Subwoofer. Active two-way operation with the LS500 is included in the PS10TD, NX242 or PS10AMP. One LS500 matches 2x PS10, additional LS500 may be used for enhanced effect.
Speaker Cables	The PS10 is wired 2- & 2+ on Speakon connectors, LS500 on 1- & 1+. Loop through Speakons are present on both products. Single identical cables can thus be used to loop through combinations of up to 2 x PS10 & 1 x LS500 in no particular order.
SHIPPING & ORDERING	
Packaging	PS10s are sold as single items and in multiples thereof.
Shipping Weight & Volume	2x PS10U = 34kg(75.1lbs) 0.169cu m(5.96cu ft).
A full selection of mounting Accessories is available, please contact your Nexo Agent for details.	

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice. [a] Response curves & data : Anechoic Far Field for the PS10 + PS10TD. Half-Space Anechoic radiation for the LS500 + PS10TD.[b] Sensitivity & Peak SPL data : these will depend on spectral distribution and crest factor of program material. Measured with band limited Pink Noise.Nominal refers to Voice Decade (300Hz - 3kHz), Wideband to the specified ±3dB range. Data are for speaker + processor + recommended amplifier combinations. Peak SPL is at clipping of recommended amplifier. [c] Directivity curves & data : obtained by computer treatment on off axis response curves.

PS10 ARCHITECT & ENGINEERING SPECIFICATIONS

The 2-way full range loudspeaker system shall have one 10", 8Ω cone transducer and a 1"-exit compression driver on a low distortion constant directivity asymmetrical dispersion horn. Horizontal dispersion shall range from 50Æ to 100Æ and vertical dispersion shall be +25°/-30°. Users shall be able to rotate the horn in 4x directions, in 90° increments, as required by the application. The system shall have a Q of 16 and a Directivity Index of 12dB (nominal) at frequencies above 3kHz. The system shall have a nominal sensitivity of 98dB (96dB wideband). When driven by a NEXO PS10AMP or by a NEXO PS10 TDcontroller properly connected to amplification capable of delivering 200 to 500Watts into an 8Ω load, the system shall produce 124 to 127dB peak SPL with a frequency response of 65Hz to 20kHz ±3dB (58Hz to 21kHz ±6dB). The system shall weigh 15kg(33.1lbs), have a tuned ported multi-angle enclosure constructed of 18ply Baltic birch, finished in structured black coating with exterior dimensions no greater than 515mmH x 316mmW x 277mmD (202.8" x 124.4" x 109"). The system shall have an internal passive crossover with a crossover point of 2kHz. Electrical connections shall be made via 2x SPEAKON NL4MP 4-pole connectors. Exterior hardware shall include one flytrack, two AeroQuip attachment points, four threaded mounting points and one pole socket. Interior components shall be protected by a powder coated perforated steel grille. The full range system shall be the NEXO PS10 with a NEXO PS10 TDcontroller, or NEXO NX242 Digital TDcontroller, or a NEXO PS10AMP. Other integrated loudspeaker/controller systems shall be acceptable, provided independent laboratory test results verify these specifications are equalled or exceeded.

PS10

PRODUCT FEATURES

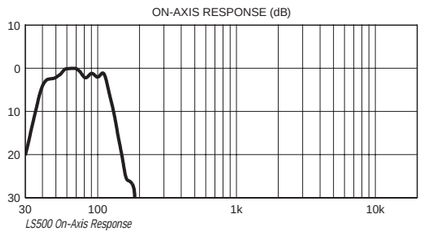
- *High-power system (134dB Peak SPL @ 1m) with 15in VLF long excursion driver.*
- *VLF extension (to 38Hz) of PS10 Loudspeakers.*
- *Sophisticated control electronics ensure reliable, linear operation.*
- *Integral pole mount that supports one or two PS10 Loudspeakers.*

LS500 SUB-BASS

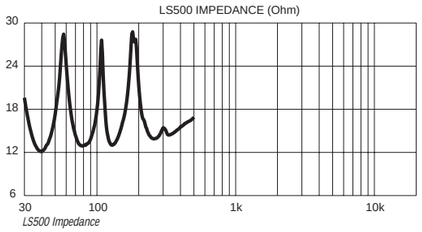
The LS500 Sub-Bass extends the usable range of the PS10 Loudspeaker to 38Hz, providing exceptional performance and high power output (134dB Peak) in an extremely compact, light weight package. The PS10 TDcontroller's integral sub section and combined signal (PS10 and LS500) SPEAKON wiring ensure cost effective and simple system implementation. One LS500 is typically used with two PS10 loudspeakers, additional units may be used for an enhanced effect.

NEXO PS10 SYSTEM
- PS10 Loudspeaker
- › LS500 Sub-Bass
- PS10 TDcontroller
- PS10 Amplifier

PS10's compact size, exceptional output and reconfigurable horn make it the perfect solution for nearly any application.



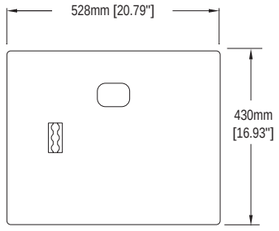
LS500 On-Axis Response

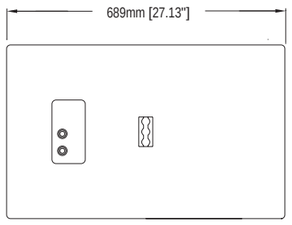


LS500 Impedance

PS10 SYSTEM APPLICATIONS

- *Touring, installed PA for clubs, A/V, theatre, broadcast, Houses of Worship, etc. High-quality stage monitoring for cabarets A/V, theatre, broadcast, etc.*
- *Fill-in system for use with larger NEXO PS/Alpha systems, or any application needing exceptional side, down and near-field augmentation.*





LS500 SUB-BASS PRODUCT FEATURES	
Components	VLF 1x 15" (38cm) long excursion 4Ω driver
Height x Width x Depth	430 x 689 x 528mm (16.88 x 27.13 x 20.75")
Weight	38kg(84lbs) net
Connectors	2x NL4MP 4-pole SPEAKON
Construction	Baltic Birch Ply & textured, polyurethane black coating
Fittings	Handles 2, integral to cabinet
Front finish	Perforated steel grilles
Flying Points	3x steel anchor points for flying tracks on side and back
Stand fittings	Internal Stand Fitting on Top (35mm, 1"3/8) accepts a mast supporting 1 or 2 PS10s.
SYSTEM SPECIFICATIONS LS500 with PS10 TDcontroller	
Frequency Response [a]	43Hz - 110Hz ±3dB
Usable Range @-6dB [a]	38Hz - 120Hz
Sensitivity 1W @ 1m [b]	101dB SPL Nominal
Nominal Peak SPL @ 1m [b]	131 to 134dB Peak (300 to 800W RMSAmp.)
Crossover Frequencies	120Hz Active through PS10TD
Nominal Impedance	4Ω
Recommended Amplifiers	300 to 800Watts into 4Ω
SYSTEM OPERATION	
Electronic Controller	The LS500 Sub-Bass must be used with a NEXO Controller (PS10 TD analogue, NX242 digital or PS10AMP integrated power amplifier). Use without a propery-connected Controller will result in poor sound quality and may damage the components.
Sub-bass	The LS500 Sub-Bass provides optional VLF extension for PS10 Loudspeakers. Active two-way operation with the PS10 is included in the PS10TD, NX242 or PS10AMP. One LS500 matches 2x PS10, additional LS500 may be used for enhanced effect.
Speaker Cables	The PS10 is wired 2- & 2+ on Speakon connectors, LS500 on 1- & 1+. Loop through Speakons are present on both products. Single identical cables can thus be used to loop through combinations of up to 2x PS10 & 1x LS500 in no particular order.
SHIPPING & ORDERING	
Packaging	LS500s are sold as single items and in multiples thereof.
Shipping Weight & Volume	1x LS500 = 38kg(88.8lbs) 0.238cu m(8.41cu ft)

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice. [a] Response curves & data: Half-Space radiation. [b] Sensitivity & Peak SPL data: These depend on spectral distribution and crest factor of program material. Measured with band limited Pink Noise. Nominal refers to (50Hz-200Hz), Wideband to the specified ±3dB range. Data are for speaker + processor + recommended amplifier combinations. Peak SPL is at clipping of recommended amplifier.

LS500 ARCHITECT & ENGINEERING SPECIFICATIONS

The subbass loudspeaker system shall have one 15" VLF, 4Ω long-excursion cone transducer. The system shall have a nominal sensitivity of 101dB. When driven by a NEXO PS10AMP or by a NEXO PS10 TDcontroller properly connected to amplification capable of delivering 300 to 800Watts into a 4Ω load, the system shall produce 131 to 134dB peak SPL with a frequency response of 43Hz to 110Hz ±3dB (38Hz to 120Hz ±6dB). The system shall have an active crossover with a crossover point of 120Hz. Electrical connections shall be made via 2x SPEAKON NL4MP 4-pole connectors. The system shall weigh 33kg(72.8 lbs), have a tuned ported rectangular enclosure constructed of 18ply Baltic birch, finished in structured black coating with exterior dimensions no greater than 430mmH x 689mmW x 528mmD (169.3" x 271.3" x 207.9"). Exterior hardware shall include one pole socket. Interior components shall be protected by a powder coated perforated steel grille. The subbass system shall be the NEXO LS500 with a NEXO PS10 TDcontroller or a NEXO PS10AMP. Other integrated loudspeaker/controller systems shall be acceptable, provided independent laboratory test results verify these specifications are equalled or exceeded.

PS10 TDCONTROLLER

The PS10 TDcontroller is an advanced analogue processor that allows the PS10 Loudspeaker and optional LS500 Subwoofer to achieve exceptional performance from such compact packages. The PS10 TD provides crossover, sensed amplifier control and system equalisation optimised for the PS10 and LS500. One PS10 TD has two inputs and three outputs, L, R and summed sub out, minimising installation cost and complexity.
Like all NEXO processors, the PS10 TDcontroller provides precision dynamic, voice coil temperature and diaphragm displacement protection through the use of selective Voltage Controlled Equalisers (VCEQs), reducing levels only at frequencies when and where necessary.

PRODUCT FEATURES

- *Precision circuits engineered for the PS10/LS500 systems permit increased sound pressure and operational reliability.*
- *Servo-controlled VCEQs provide precise dynamic control without spectral imbalance.*
- *Two inputs and three outputs enable a single PS10 TD to manage multiple PS10 and LS500 products.*
- *Comprehensive indicators and controls.*

PS10 TDCONTROLLER PRODUCT FEATURES	
Audio Inputs	2x L&R Audio inputs. Electronically balanced, 36kΩ. 2x XLR-3F connectors.
Sense Inputs	3x Amplifier-Sense Inputs (PS10 L&R, LS500). 150kΩ. 6 Pole Removable Strip Terminal.
Audio Outputs	2x L&R PS10 Audio outputs. Electronically balanced, 50Ω. Two XLR-3M. 1x Mono (L+R) LS500 Audio output. Electronically balanced, 50Ω. One XLR-3M.
Controls	Std/Max Protection Trimmer. Gain switch (back panel), 3 positions for Amps: 26/32/38 dB. Sub On switch & Sub Gain Control.
Indicators	Speaker Protect LEDs. Amp Sense & Peak LEDs.
Dimensions	1RU 19" Rack. 190mm (7.5") Depth
Weight	2.9kg(6.6lbs) net
SPECIFICATIONS	
Input Level	+28dBm max into 600Ω.
Output Level	+20dBm Max. +19dBm Max on 1kΩ
Noise	-88 dBm (22Hz - 22kHz, UnWeighted)
THD+N	< 0.03% Typ. 0.05 Max for +18dBm Output
Power Supply	110/220 Volts (internal wiring), 50/60Hz. Earth-Lift (back panel)
SYSTEM OPERATION	
Applicable Products	The PS10 TDcontroller is precisely matched to the PS10 & LS500 cabinets and includes sophisticated protection systems. Use of either product without a propery-connected Controller will result in poor sound quality and may damage the components.
Sub-bass	Active two-way operation of the PS10 Loudspeaker with the LS500 Subwoofer is included in the PS10TD.
SHIPPING & ORDERING	
Packaging	PS10TDs are sold as single items and in multiples thereof.
Shipping Weight & Volume	1x PS10TD = 3.4kg(7.5 lbs) 0.02cu m(0.71cu ft)

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice.

PS10 TDCONTROLLER ARCHITECT & ENGINEERING SPECIFICATIONS

The PS10 TDcontroller shall be configurable from a combination of 2x inputs and 3x outputs with each output providing crossover, parametric EQ, adjustable peak limiter and Temperature & Displacement protection for NEXO PS10 and LS500 products. The unit shall have electronically balanced analogue inputs and outputs. All crossover, protection parameters, and EQ are factory optimized and can't be user-accessed. The controller must model the loudspeakers in real time and this modeling shall include loudspeaker temperature and displacement. Protection shall be selective, acoustically transparent and not allow PS10 loudspeakers to exceed speaker-dependent thresholds. The device shall have 3x inputs providing feedback from amplifier output to allow real time monitoring of amplifier voltage. Crossover function between PS10 loudspeakers and the LS500 Subwoofer shall be controlled by the PS10 TDcontroller. Maximum input shall be 22dBu with CMRR 90dB@1kHz and noise floor below -100dB for the 0dB rear-panel switch. A 3-position, rear-panel gain control switch shall be adjustable between -6/0/+6dB. The Output Section shall display +22/+16/+10dBm into 600Ω load with Rear Panel switch on +6/0/-6dB (respectively). LEDs shall indicate status for; Power ON (green), Amp Sense & Peak LED's (green/Red), Temperature & Displacement (yellow) and LS500 (VLF) displacement protection (also yellow). The chassis shall be constructed of steel with a black paint finish. Input power shall range from 110 to 220VAC continuously, 50-60Hz with a rear panel earth-lift. The 1RU controller shall weigh 2.9kg(6.4lbs), with exterior dimensions of 483mmW x 44mmH x 190mmD (19" x 1.75" x 7.5"). The chassis shall be constructed of steel with a black paint finish. The controller shall be the NEXO PS10 TDcontroller. Other integrated loudspeaker-controllers shall be acceptable, provided independent laboratory test results verify these specifications are equalled or exceeded.

PS10AMP

The PS10AMP is a dedicated amplifier that allows the PS10 Loudspeaker and optional LS500 Subwoofer to achieve exceptional performance from such compact packages. The integrated PS10 TDcontroller provides crossover, sensed amplifier control and system equalisation optimised for the PS10 and LS500. Like all NEXO processors, the PS10AMP provides precision dynamic, voice coil temperature and diaphragm displacement protection through the use of selective Voltage Controlled Equalisers (VCEQs), reducing levels only at frequencies when and where necessary.

The PS10AMP has two inputs, L and R, and three outputs, L, R and summed LSub out. The PS10AMP Configuration switch automatically configures the unit for 2 channel mode (LSub Off), where the PS10AMP drives 2 to 4 PS10 Loudspeakers in stereo (2x 850 Watts/4Ω) or 3 channel mode (Lsub On), where the PS10 AMP drives 2 PS10 Loudspeakers in stereo (2x 430Watts/8Ω) and 1 LS500 Subwoofer (850W/4Ω) with a summed mono signal of the L+R input signals. Since the Configuration switch also rewires the output connectors and displays PS10AMP mode status with LED indicators, the PS10AMP minimises installation cost and complexity while ensuring faultless performance.

PS10 AMP PRODUCT FEATURES	
Power Rating	LSub Off, 2 channels: 2x 850W/4Ω (2x PS10 per channel) LSub On, 3 channels: 2x 430W/8Ω, 1x 850W/4Ω (1x PS10 per channel and 1x LS500)
S/N Ratio	-100dB
THD	< 0.05%
Damping Factor	>400:1
Slew Rate	25V/µS
Input Impedance	36kΩ (balanced)
Power Supply	115/230 VAC +/-10% 50/60Hz. Front panel selector.
Audio inputs	2x L&R Audio inputs. Electronically balanced, 36kΩ. 2x XLR-3F connectors and two parallel XLR-3M.
Audio outputs	2x NL4MP 4-pole SPEAKON connectors.
Controls Stereo	L/R Link, Level, LSub Level, Lsub On, Power On.
LED Indicators	Amp Signal, Amp Peak, Speaker Protect VLF, Speaker Protect LF, Speaker protect HF, System Configuration.
Dimensions	3RU 19" Rack. 368mm (14.5") Depth
Weight	19kg(42lbs) net
SYSTEM OPERATION	
Applicable Products	The PS10AMP is precisely matched to the PS10 & LS500 cabinets and includes the same sophisticated protection systems incorporated in the PS10 TDcontroller . Use of either product without a propery-connected AMP/Controller will result in poor sound quality and may damage the components.
LSub Off	In this mode, the PS10AMP is configured to drive two or four PS10s in stereo.
LSub On	In this mode, the PS10AMP is configured to drive two PS10s in stereo and 1 LS500 with a summed mono signal of the L+R input signals.
SHIPPING & ORDERING	
Packaging	PS10AMPs are sold as single items and in multiples thereof.
Shipping Weight & Volume	1x PS10AMP = 19kg(42lbs) 0.073cu m (2.59cu ft)

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice.

PS10AMP (AMPLIFIER/CONTROLLER) ARCHITECT & ENGINEERING SPECIFICATIONS

The power amplifier shall be of 2 or 3-channel with instantaneous configuration via front-panel switch, allowing 2-way, full bandwidth configuration or 3-way use with the appropriate subbass. The amplifier shall integrate all TDcontroller functions, including internal sense-connections and identical specifications of the stand-alone TDcontrollers, described on the page #16 of this brochure. Each balanced Line Input shall have a chaining male connector for operation of multiple PS10AMPs. Two SPEAKON NL4MP 4-pole connectors shall automatically configure and provide visual indication of wiring status. The unit shall have automatic configuration and servo-controlled VCEQs. The L&R link switch shall permit Mono wiring when independent PS10AMP stacks are used at stage L&R. Front panel LED indicators shall include Amp Signal, Amp Peak, Speaker Protect VLF, Speaker Protect LF, Speaker protect HF and System Configuration. A single PS LED shall light for each Stereo channel. Sub ON status shall indicate when three amplifier channels are in operation. The amplifier shall include a back-to-front, variable speed fan cooling, while all connections and controls shall be front panel-mounted including mains fuses and voltage selection. The slew rate of the amplifier shall exceed 25V/µS (stereo mode). The unit shall have two electronically balanced inputs with XLR-3F connectors at a 36Ω (balanced) impedance, and 2x XLR-3M looping connectors. Damping factor shall be >400:1. Frequency response shall measure 20Hz to 20kHz, ±0.1dB at 1W into 8Ω per channel (stereo). In Sub ON mode, each PS10AMP shall provide 3x amplifier channels, with L&R channels producing 430W/8Ω and 1x (sub) amplifier channel producing 850W/4Ω. In Sub OFF mode each stereo PS10AMP channel shall produce 850W/4Ω. System function shall always be stereophonic. In Sub OFF mode, the Sub amplifier channel shall be rerouted to the PS10s, so that 1700W output shall always be used by the PS system. Level control shall operate on all channels simultaneously, according to configuration. The amplifier shall have a steel chassis with 48.3cm(19in) EIA standard (RS-310-B) rack mounting dimensions. The 3RU amplifier shall weigh 19kg(41.9lbs) and be 368mm(14.5") deep. AC power requirements shall be 115/230VAC, ±10% at 50/60Hz. The amplifier shall be designated as the NEXO PS10AMP. Other integrated loudspeaker-amplifier/controllers shall be acceptable, provided independent laboratory test results verify these specifications are equalled or exceeded.

PS15

PS15 LOUDSPEAKER

The PS15 Loudspeaker can be safely driven with over 1000 Watts of amplifier power, yet it has a small volume and reduced weight. The dispersion, architecture and weight balance of the PS15 Loudspeaker are designed to provide both exceptional PA and stage monitor performance from a single product without compromise. This flexibility is realized by a proprietary constant directivity asymmetrical dispersion horn, easily rotated in four positions by the user. Coupled with the horn's unique progressive horizontal (50° to 100°) and vertical (55°) dispersion, the most suitable pattern can be selected for vertical or horizontal PA usage, or switchable active wedge monitoring. The 8Ω, 2-way passive design requires a single amplifier channel to deliver bi-amped performance for less money, space and complexity.

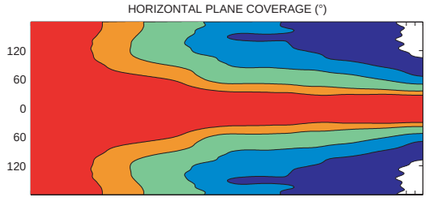
PRODUCT FEATURES

- *High-power system (134dB Peak SPL @ 1m) with 15in LF and 2in HF drivers.*
- *Rotatable asymmetrical horn and unique cabinet architecture ensure versatility; user-adaptable for both PA and stage monitoring applications.*
- *Two-way, switchable passive or active design for precise performance-matching to user requirements.*
- *Sophisticated control electronics ensure reliable, linear operation.*
- *Supported with a full range of mounting and flying accessories.*

PS15 SYSTEM APPLICATIONS

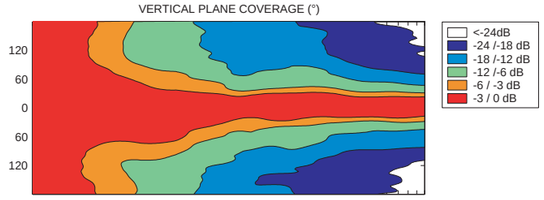
- *High-power mid-sized touring, installed PA for clubs, A/V, theater, Houses of Worship, broadcast, etc.*
- *High-quality, extremely powerful stage monitoring for A/V, theatere, cabarets, broadcast, etc.*
- *Fill-in system for any PA requiring side, down and near-field augmentation.*

HORIZONTAL PLANE COVERAGE (°)



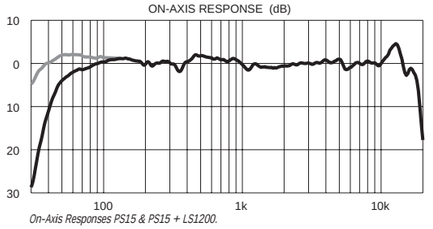
PS15 horizontal Off-Axis Response

VERTICAL PLANE COVERAGE (°)



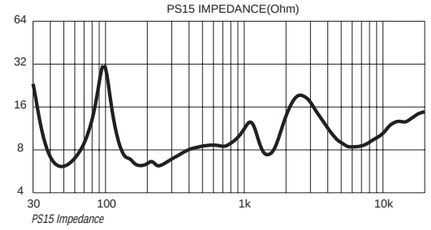
PS15 Vertical Off-Axis Response

ON-AXIS RESPONSE (dB)



On-Axis Responses PS15 & PS15 + LS1200.

PS15 IMPEDANCE(Ohm)



PS15 Impedance

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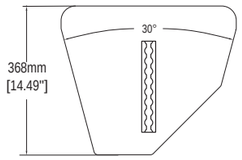
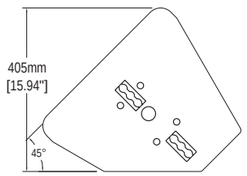
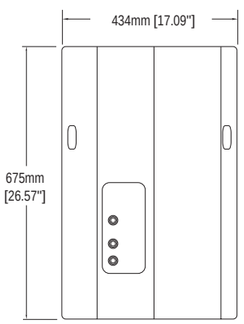
NEXO PS15 SYSTEM

› PS15 Loudspeaker
LS1200 Sub-Bass
PS15 TDcontroller
PS15 Bass

PS15's flexible architecture, high power handling and reconfigurable horn make it the perfect loudspeaker system for nearly any application.







PS15 LOUDSPEAKER PRODUCT FEATURES	
Components	LF 1x 15" (38cm) 6Ω driver HF 1x 2" throat, 3" titanium diaphragm, driver + Low Distortion, Constant Directivity Asymmetrical Dispersion Horn.
Height x Width x Depth	675 x 434 x 368mm (26.63 "x 17.13"x 14.5")
Weight	29kg(64lbs)
Connectors	3x NL4MP 4-pole SPEAKON; Passive In Passive Loop Thru, Active In
Construction	Baltic Birch Ply finished with textured, polyurethane black coating
Fittings	Handles 2, integral to cabinet
Front finish	Acoustic foam on perforated steel grille (77% transparent)
Flying Points	1x steel anchor point for flying track on top (9 positions)
	2x steel anchor plates for flying track on bottom (3 positions)
Stand fittings	Built in Stand Fitting, 35mm (1 3/8")
Fixed Installation	One set of 4 fixing points (Omnimount 100 Std spacing)
SYSTEM SPECIFICATIONS PS15 with PS15 TDcontroller MkII	
Frequency Response [a]	50Hz - 18kHz ±3dB (30Hz - 19kHz ±3dB with LS1200 Subwoofer)
Usable Range @-6dB [a]	47Hz - 18kHz (29Hz - 18kHz with LS1200 Subwoofer)
Sensitivity 1W @ 1m [b]	102dB SPL Nominal - 99dB SPL Wideband
Nominal Peak SPL @ 1m [b]	131 to 134dB Peak (for 550 to 1200 W RMS Amp.)
HF Dispersion [c]	50° to 100° Hor. x 55° Vert. Rotatable Horn, 4 positions
Directivity	Q & DI [c] Q : 16 Nominal DI: 12dB Nominal (f > 1.5kHz)
Crossover Frequencies	900Hz Passive or Active (internally switchable)
Nominal Impedance	Passive 8Ω Active; LF 6Ω, HF 8Ω.
Recommended Amplifiers	550 to 1200Watts into 8Ωs for 1x PS15; 1000 to 1800Watts into 4Ω for 2x PS15 per channel.
SYSTEM OPERATION	
Electronic Controller	The PS15 Loudspeaker must be used with a NEXO Controller (PS15 TD MkII analogue or NX242 digital). Use without a propery-connected Controller will result in poor sound quality and may damage the components.
Dispersion configuration	After removing the quick-release front grille, the HF Horn can be rotated to one of 4 positions for dispersion configuration.
Sub-bass	The PS15 Loudspeaker can be used with or without the optional LS1200 Subwoofer. Active two-way operation with the LS1200 is included in the PS15TD MkII, or NX242.
Speaker Cables	The PS15 is wired 2- & 2+ on Passive Input Speakon connectors, LS1200 on 1- & 1+. Loop through Speakons are present on both products. Single identical cables can thus be used to loop through combinations of Passive PS15 & LS1200 in no particular order.
SHIPPING & ORDERING	
Packaging	PS15s are sold as single items and in multiples thereof.
Shipping Weight & Volume	PS15U = 32kg(70lbs) 0.2cu m(7cu ft).
A full selection of mounting Accessories is available, please contact your Nexo Agent for details.	

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice.[a] Response curves & data : Anechoic Far Field for the PS15 + PS15TD MkII. Half-Space Anechoic radiation for the LS1200 + PS15TD MkII. [b] Sensitivity & Peak SPL data : these will depend on spectral distribution and crest factor of program material. Measured with band limited Pink Noise. Nominal refers to Voice Decade (300Hz - 3kHz), Wideband to the specified ±3dB range. Data are for speaker + processor + recommended amplifier combinations. Peak SPL is at clipping of recommended amplifier. Measurements are made with PS15 in passive mode. [c] Directivity curves & data : obtained by computer treatment on off axis response curves. Omnimount is a registered trademark of Omnimount Systems Inc.

PS15 ARCHITECT & ENGINEERING SPECIFICATIONS

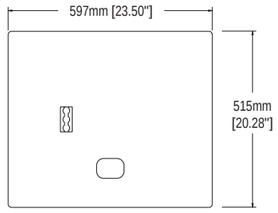
The 2-way full range loudspeaker system shall have one 15" 6Ω cone transducer and a 2"-exit compression driver on a low distortion constant directivity asymmetrical dispersion horn. Horizontal dispersion shall range from 50Æ to 100Æ and vertical dispersion shall be +25Æ/-30Æ. Users shall be able to rotate the horn in 4 directions, in 90° increments, as required by the application. The system shall have a Q of 16 and a Directivity Index of 12dB (nominal) at frequencies above 1.5kHz. The system shall have a nominal sensitivity of 102dB (99dB wideband). When driven by a NEXO NX242 Digital TDcontroller or NEXO PS15 TDcontroller MkII, properly connected to amplification capable of delivering 550 to 1200Watts into an 8Ω load, the system shall produce 131 to 134dB peak SPL with a frequency response of 50Hz to 18kHz ±3dB (47Hz to 18kHz ±6dB). The system shall have an active or passive crossover with internal switching with a crossover point of 900Hz. Electrical connections shall be made via 3x SPEAKON NL4MP 4-pole connectors.
The system shall weigh 29kg(63.9 lbs), have a tuned ported multi-angle enclosure constructed of 18ply Baltic birch, finished in structured black coating with exterior dimensions no greater than 675mmH x 434mmW x 368mmD (265.7" x 170.9" x 144.9"). Exterior hardware shall include one top-mounted flytrack, two bottom-mounted flytracks and four threaded mounting points. Interior components shall be protected by a powder coated perforated steel grille. The full range system shall be the NEXO PS15 with a NEXO PS15 TDcontroller MkII or a NEXO NX242 Digital TDcontroller. Other integrated loudspeaker/controller systems shall be acceptable, provided independent laboratory test results verify these specifications are equalled or exceeded.

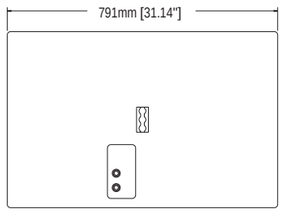
PS15

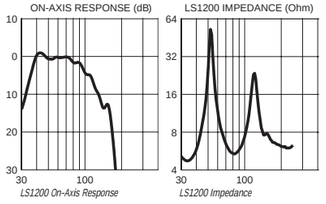
PS15

LS1200 SUB-BASS

The LS1200 Sub-Bass extends the usable range of the PS15 Loudspeaker to 29Hz, providing high performance and high power output (135dB Peak) in an extremely compact, light weight package. The PS15 TDcontroller's integral sub section and combined signal (PS15 and LS1200) SPEAKON wiring ensure cost effective and simple system implementation. One LS1200 is typically used with two PS15 loudspeakers, although additional units may be used for an enhanced LF impact.







LS1200 SUB-BASS PRODUCT FEATURES	
Components	VLF 1x 18" (46cm) long excursion 6Ω driver
Height x Width x Depth	515 x 791 x 597mm (20.25" x 31.13" x 23.5")
Weight	45kg(99lbs) net
Connectors	2x NL4MP 4-pole SPEAKON
Construction	Baltic Birch Ply & textured, polyurethane black coating
Fittings	Handles 2, integral to cabinet
Front finish	Perforated steel grilles
Flying Points	3x steel anchor points for flying tracks on side and back
Stand fittings	Internal Stand Fitting on Top (35mm, 1 3/8") accepts a mast supporting 1 PS15.
SYSTEM SPECIFICATIONS LS1200 with PS15 TDcontroller MkII	
Frequency Response [a]	30Hz - 120Hz ±3dB
Usable Range @-6dB [a]	29Hz - 130Hz
Sensitivity 1W @ 1m [b]	102dB SPL Nominal
Nominal Peak SPL @ 1m [b]	133 to 135dB Peak (800 to 1200 W RMS Amp.)
Crossover Frequencies	80Hz Active through PS15TD
Nominal Impedance	4Ω
Recommended Amplifiers	800 to 1200Watts into 4Ω
SYSTEM OPERATION	
Electronic Controller	The LS1200 Sub-Bass must be used with a Nexo Controller (PS15 TD MkII analogue or NX242 digital). Use without a propery-connected Controller will result in poor sound quality and may damage the components.
Sub-bass	The LS1200 Sub-Bass provides optional VLF extension for PS15 Loudspeakers. Active two-way operation with the PS15 is included in the PS15TD MkII, or NX242.
Speaker Cables	The PS15 is wired 2- & 2+ on Speakon connectors, LS1200 on 1- & 1+. Loop through Speakons are present on both products. Single identical cables can thus be used to loop through combinations of up to 2x PS15 (passive mode) & 1x LS1200 in no particular order.
SHIPPING & ORDERING	
Packaging	LS1200s are sold as single items and in multiples thereof.
Shipping Weight & Volume	1x LS1200 = 49kg(108lbs) 0.320cu m(11cu ft)

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice.[a] Response curves & data: Half-Space radiation. [b] Sensitivity & Peak SPL data: These depend on spectral distribution and crest factor of program material. Measured with band limited Pink Noise. Nominal refers to (40Hz-150Hz), Wideband to the specified ±3dB range. Data are for speaker + processor + recommended amplifier combinations. Peak SPL is at clipping of recommended amplifier.

LS1200 ARCHITECT & ENGINEERING SPECIFICATIONS

The subbass loudspeaker system shall have one 18" VLF, 6Ω long-excursion cone transducer. The system shall have a nominal sensitivity of 102dB. When driven by a NEXO NX242 Digital TDcontroller or by a NEXO PS15 TDcontroller MkII, properly connected to amplification capable of delivering 800 to 1200Watts into a 4Ω load, the system shall produce 132 to 135dB peak SPL with a frequency response of 30Hz to 120Hz ±3 dB (29Hz to 130Hz ±6dB). The system shall have an active crossover with a crossover point of 80Hz. Electrical connections shall be made via 3x SPEAKON NL4MP 4-pole connectors.
The system shall weigh 45kg(99.2 lbs), have a tuned ported rectangular enclosure constructed of 18ply Baltic birch, finished in structured black coating with exterior dimensions no greater than 515mmH x 791mmW x 597mmD (202.8" x 311.4" x 235.0"). Exterior hardware shall include four flytracks and one-pole sockets. Interior components shall be protected by a powder coated perforated steel grille. The subbass system shall be the NEXO LS1200 with a NEXO PS15 TDcontroller MkII or a NEXO NX242 Digital TDcontroller. Other integrated loudspeaker/controller systems shall be acceptable, provided independent laboratory test results verify these specifications are equalled or exceeded.

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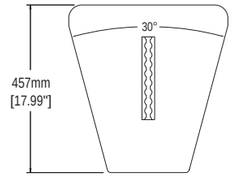

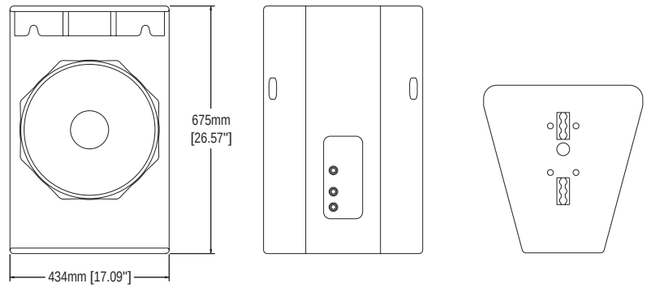

PS15 BASS

The PS15 Bass increases PS15 Loudspeaker sound pressure levels in the 40 to 200Hz regions for bass heavy applications and when single PS15s are used without the benefits of multiple cabinet coupling.
The PS15 Bass is connected in parallel with a PS15 and doesn't require an additional controller or amplifier channel (providing the combined load is within the amplifier's specification).
The PS15 Bass has the same size front and grill, so clusters are visually and acoustically coherent. Its deeper trapezoidal cabinet provides increased volume for extended bass response.

PRODUCT FEATURES

- *High power bass reinforcement (134dB Peak SPL@1m) for PS15 systems with 15in LF driver.*
- *Low phase shift passive crossover.*
- *PS15 compatible shape and architecture.*
- *Easy set-up and cabling.*
- *Sophisticated control electronics ensure reliable, linear operation.*

PS15 BASS PRODUCT FEATURES	
Components	LF 1 x 15" (38cm) 6Ω driver
Height x Width x Depth	675 x 434 x 457mm (26.63" x 17.13" x 18")
Weight	26kg(57lbs)
Connectors	3x NL4MP 4-pole SPEAKON; Passive In Passive Loop Thru, Active In
Construction	Baltic Birch Ply finished with textured, polyurethane black coating
Fittings	Handles 2, integral to cabinet
Front finish	Acoustic foam on perforated steel grille (77% transparent)
Flying Points	1x steel anchor point for flying track on top (9 positions)
	2x steel anchor plates for flying track on bottom (3 positions)
Stand fittings	Built in Stand Fitting, 35mm(1 3/8")
SYSTEM SPECIFICATIONS PS15BASS with PS15 TDcontroller MkII	
Frequency Response [a]	40Hz - 300Hz ±3dB
Sensitivity 1W @ 1m [b]	102dB SPL Nominal. 99dB SPL Wideband
Nominal Peak SPL @ 1m [b]	131 to 134dB Peak (for 550 to 1200W RMS Amp.)
Cutoff Frequency	120Hz Passive - 6dB per octave - Reactance compensation
Nominal Impedance	8Ω
Recommended Amplifiers	550 to 1200Watts into 8Ω for 1x PS15Bass per channel; 1000 to 1800Watts into 4Ω for 1x PS15 Bass + 1x PS15 or 2x PS15 Bass per channel
SYSTEM OPERATION	
Electronic Controller	The PS15 Bass must be used with a Nexo Controller (PS15 TD MkII analogue or NX242 digital). Use without a propery-connected Controller will result in poor sound quality and may damage the components. Coupling with the PS15: The PS15 Loudspeaker is not high-pass filtered when used with the PS15 Bass, which has a low order, minimum phase shift 120Hz passive crossover and reactance compensation. Although it is always preferable to closely couple units, the relative positioning of the PS15 and PS15 Bass is less critical than with sharply filtered Sub-bass units.
Speaker Cables	The PS15 Bass is connected directly in parallel with PS15s. Single identical cables can thus be used to loop through combinations of Passive or Active PS15 & PS15 Bass in no particular order.
SHIPPING & ORDERING	
Packaging	PS15Bass are sold as single items and in multiples thereof.
Shipping Weight & Volume	PS15BASS = 30kg(66lbs) 0.2cu m(7cu ft).
Accessories	A full selection of mounting Accessories is available, please contact your Nexo Agent for details.

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice. [a] Response curves & data: Half-Space radiation. [b] Sensitivity & Peak SPL data: These depend on spectral distribution and crest factor of program material. Measured with band limited Pink Noise. Nominal refers to (60Hz-300Hz), Wideband to the specified ±3dB range. Data are for speaker + processor + recommended amplifier combinations. Peak SPL is at clipping of recommended amplifier.

NEXO PS15 BASS ARCHITECT & ENGINEERING SPECIFICATIONS

The low frequency loudspeaker system shall have one 15", 6Ω cone transducer. The system shall have a nominal sensitivity of 102dB (99dB wideband). When driven by a NEXO NX242 Digital TDcontroller or by a NEXO PS15 TDcontroller MkII, properly connected to amplification capable of delivering 550 to 1200Watts into an 8Ω load, the system shall produce 131 to 134dB peak SPL with a frequency response of 40Hz to 300Hz ±3dB (29Hz to 130Hz ±6dB). The system shall have an internal passive 6dB per octave low-phase-shift crossover with reactance compensation and a 120Hz crossover point. Electrical connections shall be made via 3x SPEAKON NL4MP 4-pole connectors. (Passive In, Passive Loop Thru, Active-Loop In)
The system shall weigh 26kg(57.3 lbs), have a tuned ported trapezoidal enclosure constructed of 18ply Baltic birch, finished in structured black coating with exterior dimensions no greater than 675mmH x 434mmW x 457mmD (265.7" x 170.9" x 179.9"). Exterior hardware shall include one top-mounted flytrack and two bottom-mounted flytracks. Interior components shall be protected by a powder coated perforated steel grille. The low frequency system shall be the NEXO PS15 Bass with a NEXO PS15 TDcontroller MkII or a NEXO NX242 Digital TDcontroller. Other integrated loudspeaker/controller systems shall be acceptable, provided independent laboratory test results verify these specifications are equalled or exceeded.

NX242
DIGITAL
TD CONTROLLER

PS15 TDCONTROLLER MKII

The PS15 TDcontroller MkII is an advanced analogue processor that allows the PS15 Loudspeaker and optional PS15Bass and LS1200 Subwoofers to achieve exceptional performance from such compact packages. The PS15 TD MkII provides crossover, sensed amplifier control and system equalisation optimised for the PS15, PS15Bass and LS1200.
The PS15 TD MkII also features user-selectable passive or active (bi-amp) operation of the PS15 Loudspeaker. One PS15 TD MkII has two inputs and three outputs, including summed sub out, minimising installation cost and complexity. Like all NEXO processors, the PS15 TD MkII provides precision dynamic, voice coil temperature and diaphragm displacement protection through the use of selective Voltage Controlled Equalisers (VCEQs), reducing levels only at frequencies when and where necessary.

PRODUCT FEATURES

- *Precision circuits engineered for the PS15/PS15BASS/LS1200 systems permit increased sound pressure and operational reliability.*
- *Servo controlled VCEQs provide precise dynamic control without spectral imbalance*
- *Two inputs and three outputs enable a single PS15 TD MkII to manage multiple PS15, PS15Bass and LS1200 products.*
- *User configurable for passive or active (bi-amp) operation of the PS15 Loudspeaker.*
- *Comprehensive indicators and controls.*

PS15 TDCONTROLLER MKII PRODUCT FEATURES	
Audio Inputs	2x L&R Audio inputs. Electronically balanced, 50KΩ. 2x XLR-3F connectors.
Sense Inputs	3x Amplifier Sense Inputs, 180kΩ. 6-Pole Removable Strip Terminal. Passive Mode, PS15 L&R, LS1200). Active Mode, PS15 LF and HF, LS1200.
Audio Outputs	3x audio outputs. Electronically balanced, 50Ω. 3x XLR-3M connectors. Passive Mode, two PS15 L&R, one Mono (L+R) LS1200. Active Mode, one PS15 LF, one PS15HF, one Mono (L+R) LS1200
Controls	Front panel: Overlap/Crossover switch, Two Bass EQ trimmers (+/- 3 dB), Three Peak Limiter Adjust trimmers. Three Gain trimmers (+/- 6dB). Back panel: Gain switch (back panel), 3 positions: -6 / 0 / +6 dB. Internal: Active/Passive Mode switch. Three Protection trimmers.
Indicators	Speaker Protect LEDs. Amp Sense & Peak LEDs. Active Mode LED. Power ON LED.
Dimensions	1RU 19" Rack. 210mm (8.5") Depth
Weight	3.3kg(7.3lbs) net
SPECIFICATIONS	
Input Level	+28dBm max into 600Ω
Output Level	+22dBm
Noise	-88dBm (22Hz - 22kHz, UnWeighted)
THD+N	< 0.03% Typ. 0.05 Max for +18dBm Output
Power Supply	110/220 Volts (External Rear Panel Switch), 50/60Hz. Earth-Lift (back panel)
SYSTEM OPERATION	
Applicable Products	The PS15 TDcontroller MkII is precisely matched to the PS15, PS15BASS & LS1200 cabinets and includes sophisticated protection systems. Use of either product without a propery-connected Controller will result in poor sound quality and may damage the components.
Sub-bass	Active two-way operation of the PS15 Loudspeaker in passive mode or three-way operation in active mode with the LS1200 Subwoofer is included in the PS15TD MkII.
SHIPPING & ORDERING	
Packaging	PS15TD MkIIs are sold as single items and multiples thereof.
Shipping Weight & Volume	1x PS15UTD = 3.85kg (8.47lbs) 0.02cu m (0.71cu ft)

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice.

PS15 TDCONTROLLER MKII ARCHITECT & ENGINEERING SPECIFICATIONS

The 1RU PS15 TDcontroller MKII shall be configurable from a combination of 2x inputs and 3x outputs with each output providing crossover, parametric EQ, and mid-filter limiters for NEXO PS15 products. The unit shall have electronically balanced analogue inputs and outputs. Each input must provide LF shelving filter to compensate ground or stacking effects, ±6dB LEVEL TRIM controls for each output must be independent and directly accessible through front-panel potentiometers. All crossover, protection parameters, and EQ are factory optimized and can't be user-accessed. The controller must model the loudspeakers in real time and this modeling shall include loudspeaker temperature and displacement. Protection shall be selective, acoustically transparent and not allow PS15 loudspeakers to exceed speaker-dependent thresholds. The controller shall have 3x inputs providing feedback from amplifier output to allow real time protections on real voltage. Active, two-way operation of PS15 loudspeakers, with the LS1200 Subwoofer, shall be controlled by the PS15 TDcontroller. The device shall change between passive and active switching through internal jumper connections. Maximum input shall be 22dBu with CMRR 90dB@1kHz and THD+N 0.05%@1kHz at +18dBm output. A 3-position, rear panel gain control switch shall be adjustable between -6/0/+6dB. The Output Section shall display +28/+22/+16dBm into 600Ω load with Rear Panel switch on +6/0/-6dB (respectively). LEDs shall indicate status for; Power ON (green), Amp-Sense & Peak LED's (green/Red), Temperature & Displacement (yellow) and LS1200 (VLF) displacement protection (also yellow).
The unit shall have the following front panel controls: Overlap/Crossover Switch; 2x Bass EQ trimmers; 3x Peak Limiter Adjust trimmers; 3x Gain trimmers, and the following LED indicators: Power On; Active Mode; Amp-Sense; Amp Peak; Speaker Protect. The unit's rear panel shall have the following controls: 3-position Amp Gain switch; Active/Passive mode switch; 3x Protection trimmers; Earth Lift. The 1RU device shall weigh 3.3kg(7.3lbs), be steel-constructed, with a blue paint finish and exterior dimensions of 483mmW, 44mmH and 210mmD (19" x 1.75" x 8.5"). Input power shall be 110/220VAC, 50-60Hz. The analog loudspeaker management controller shall be the NEXO PS15 TDcontroller MkII. Other analog loudspeaker management controllers shall be acceptable, provided independent laboratory test results verify these specifications are equalled or exceeded.

www.nexo-sa.com

NX242 TDCONTROLLER

NEXO's, new generation NX242 Digital TDcontroller is a network-enabled, proprietary digital processor that maintains exceptional performance and reliability in GEO, Alpha, AlphaE and PS loudspeaker systems and associated SubBasses.
The NX242 provides crossover, Sensed-amplifier control and system alignment acoustically matched to each NEXO component. The NX242's complex software algorithms integrate this calibrated data with sensed voltage and current measurements to control precisely transducer temperature and displacement, ensuring that all NEXO systems deliver optimum sonic performance.

NX242 FEATURES

- ***Precision circuits engineered for NEXO loudspeakers permit increased sound pressure and operational reliability.***
- ***Flexible loudspeaker management for all NEXO loudspeaker systems, providing crossover, driver protection and system alignment.***
- ***User-configurable inter-channel gain, delay and array EQ.***
- ***Low and High-pass filters optimised to work in conjunction with overall system response.***
- ***High-quality audio performance, 24bit data with 48bit accumulator; 100MIPS.***
- ***2x audio inputs, 4x audio outputs and 4 sense inputs enable a single NX242 to manage easily multiple NEXO cabinets across each product range.***
- ***Comprehensive 16x2 character backlit LCD display, indicators and controls.***
- ***Optional Remote Control, additional 100MIPS DSP and memory resources via the NXtension CAI expander board, based upon the CAMCO CAI protocol.***
- ***Optional Remote Control, additional 100MIPS DSP and memory resources and link to the EtherSound Network (4in/4out) via the NXtension-ES4 expander Board.***
- ***4x NX242's processed (digital) audio outputs to 64x uncompressed channels of 24bit/48kHz of audio transmission over Ethernet.***
- ***Updateable Flash EPROM (Firmware) Upgrades.***
- ***Remote contol software is WIN2000/XP OS compliant.***

NX242 PRODUCT SPECIFICATIONS	
Output Level	+28dBu Max into 600Ω.
Dynamic Range	All Channels = 110dB.
THD+N Output	Typ 0.005% @ 1000Hz @ 27dBu.
Latency Time	1.4ms flat set-up
Output Level	110-220 Volts, 50-60Hz continuous operation (Operating range 90-264V)
Audio Inputs	2x L&R Heavy Duty Audio inputs, 24bit convertors; Electronically balanced and floating, 20kOhm. CMMR=80dB. 2x XLR 3 connectors.
Sense Inputs	4x Amplifier Sense-Inputs, 18bit converters; Floating 150kOhm. 8-Pole Removable Strip Terminal.
Audio Outputs	4x audio outputs, 24bit converters, Electronically balanced, 500hm. 3x XLR-3M connectors.
Processing	24bit data with 48bit accumulator. 100MIPS.
Front panel	Menu A and Menu B buttons. 16 x 2 character backlit LCD Display. Select Wheel and Enter Button; Four MUTE/SOLO Buttons.
Indicators	4x Speaker Protect yellow LEDs. 4x green Amp Sense LEDs. 4x red Peak LEDs. 4x red Mute LEDs; 2x red LEDs; Input CLIP and DSP CLIP.
Rear panel	On/Off Mains switch; mains IEC socket; RS232 serial communications connector; Expansion slot for processor extension card.
Flash/EPROM	Software upgrades and new cabinet set-ups are available from NEXO web site.
Dimensions	1RU (19in) Width, 230mm (9in) Depth
Weight	3.8kg(8.8lbs) net
USER CONTROLS	
System Selection	Allows control from all NEXO ranges.
System Set-up	Within the selected range, allows the cabinet to be set for passive or active mode, aux, mono or stereo subs, wedge or FOH operations depending on system selected. Up to 80x factory pre-sets.
Protection	Peak Limiter, Displacement and Temperature protection on every channel; Physio control of the Protection limiter & compressors Soft Clip Automatic tracking of amplifier clip point
Delay	Up to 150m (465 ft.) of delay in 10cm (.4in) steps; on Sub channel, Main channels or Sub + Main linked
Input Sensitivity	Level From 6dB to +12dB in 3dB steps.
Output Level	Global and inter-channel gain 6dB in 0.5dB steps.
Amplifier Gain Reading	Allows amplifier gain checking with program material.
Mute/Solo	Changes front panel buttons from Channel Mute to Solo
Save/Recall	Set-up Stores up to 10 user set-ups; On- the-fly recall, without mute or glitches for instant comparison.
Array EQ	LF or HF shelving filter to compensate ground or stacking effects, +/-6dB
Security Mode	Password protected in Read-Only Mode
SHIPPING & ORDERING	
Packaging	NX242s are sold as single items and multiples thereof.
Shipping Weight & Volume	1x NX242 = 4kg(8.8lbs) 0.02 cu m (0.71 cu ft)

Complying with the safety objectives of 73/23/EEC & 89/336/EEC directives. (EN 60065-1998, EN55103-1996)
CB scheme cULus certification in progress.

NX242 ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The 1RU TDController shall be configurable from a combination of two inputs and four outputs with each output providing facilities for crossover, parametric EQ, mid-filter limiters, and delays for all the current NEXO ranges. The unit shall have electronically balanced analogue inputs and outputs. Each input must have facilities for automatic EQ, user configurable delays, Soft Clip Automatic tracking of amplifier clip point, plus LF or HF shelving filter to compensate ground or stacking effects, ±6dB. Any output may take its feed from any input, including a mono sum of the two inputs. MUTE (or solo) buttons and LEVEL TRIM controls for each outputmust be independent and directly accessible through front-panel switches.Data shall be numerically displayed on 16x2 character backlit LCD Display and controlled from Menu A and Menu B buttons or Wheel and Enter Button. Up to 80x factory pre-sets, within the selected range, shall allow cabinets to be configured for passive or active mode, aux, mono or stereo subs, wedge or FOH function. All crossover, protection parameters, and EQ are factory optimized and can't be modified by the user. Password protected: Read-Only Mode. The controller must model the loudspeakers in real time and this modeling shall include loudspeaker temperature and displacement. Protection algorithms shall be selective, acoustically transparent and not allow the loudspeaker to exceed speaker-dependent thresholds. The controller shall be able to apply DSP to the loudspeaker to achieve cabinet directivity control if needed.The controller shall have 4x inputs providing feedback from amplifier output to allow real time monitoring of amplifier gain and clipping voltage. The controller shall display an extension slot, allowing factory (or user)insertion a daughter board to increase memory and DSP resources and add remote function control. The controller shall be the NEXO NX242 TDController.