



**45N**  
**12**

The world's first line monitor

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**NEXO**



# 45°N 12

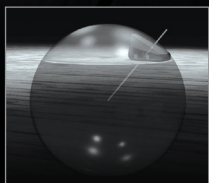
Any Stage. Any Musician. One Monitor.



The revolutionary NEXO 45°N12 brings all the benefits of line array technology to stage monitoring. Incorporating a number of groundbreaking technologies, the 45°N12 provides musicians, contractors and rental companies with a single, scalable solution to all their monitoring requirements

Alongside the obvious benefit of a 'one box' inventory, the 45°N12 also delivers extraordinary directivity and consistency of coverage up to 2.5 metres back, plus very high level before feedback. And if you need more SPL and wider coverage, just lock cabinets together to create 'monitor arrays'.

Say hello to the 'smiling' waveguide.  
A serious advance in monitor technology.



First, take a sphere. Then move the equator to the 45 degree north parallel. Now, slice off the top. This becomes the model for NEXO's revolutionary 45°N12 Line Monitor. It also explains the name.

With the point source located at the centre of

the sphere, the waveguide radiates the high frequency at 45°. Unlike a conventional waveguide in which the exit is rectangular the NEXO monitor's waveguide forms a smile. This takes into account the curvature at the surface of the sphere. By creating a virtual acoustic source behind the cabinet and beneath the stage, there's no interference between wavefronts when cabinets are locked together to form monitor arrays.

Bringing the benefits of line array technology to the stage.

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The 45°N12 incorporates an ingenious magnetic locking system, so it's easy to lock cabinets together to create monitor arrays where more SPL and wider coverage are needed.

and NXAMP 4x4 Powered Digital Controllers provide convenient and optimised control and amplification for 45°N12s in multiple configurations (see pages 10/11).

As is the case with all NEXO systems, the 45°N12 is controlled, powered and monitored by dedicated NEXO TDControllers. NXAMP 4x1



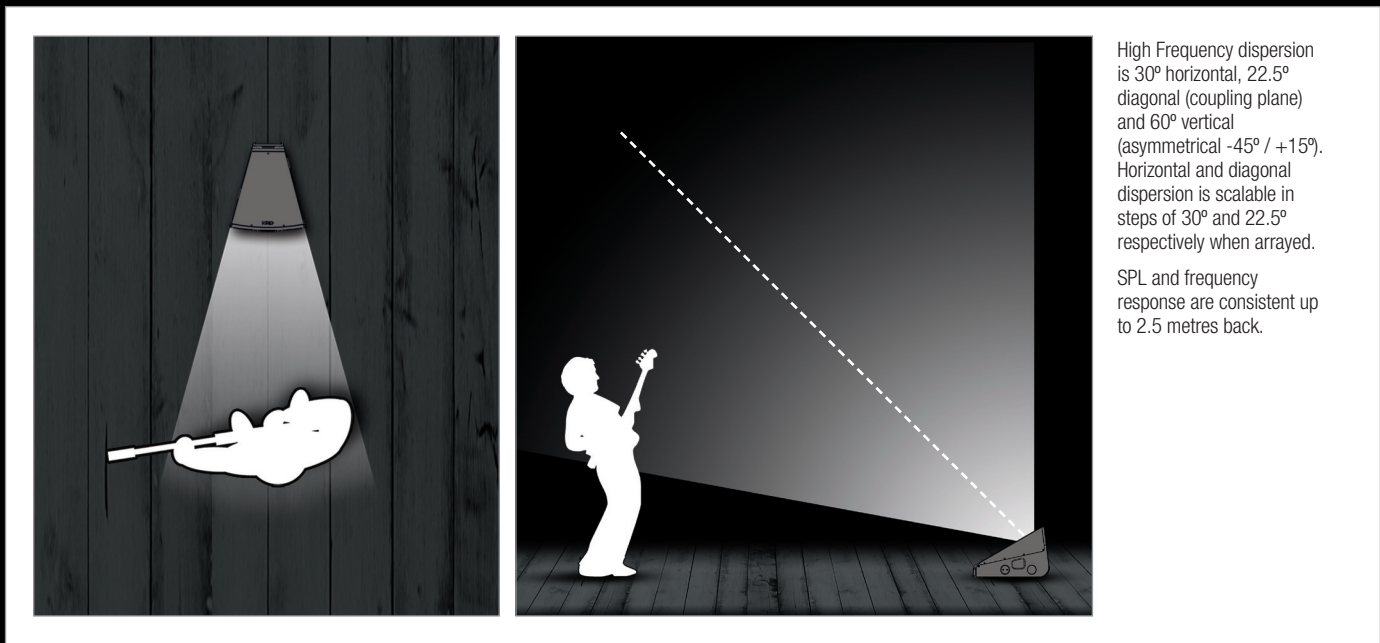
Locking magnets are located on the sides of the 45°N12 cabinet.



Cabinets can be locked to form monitor arrays such as these stereo pairs – perfect for vocalists.

Directional and scalable,  
with very high headroom before feedback.

## Coverage



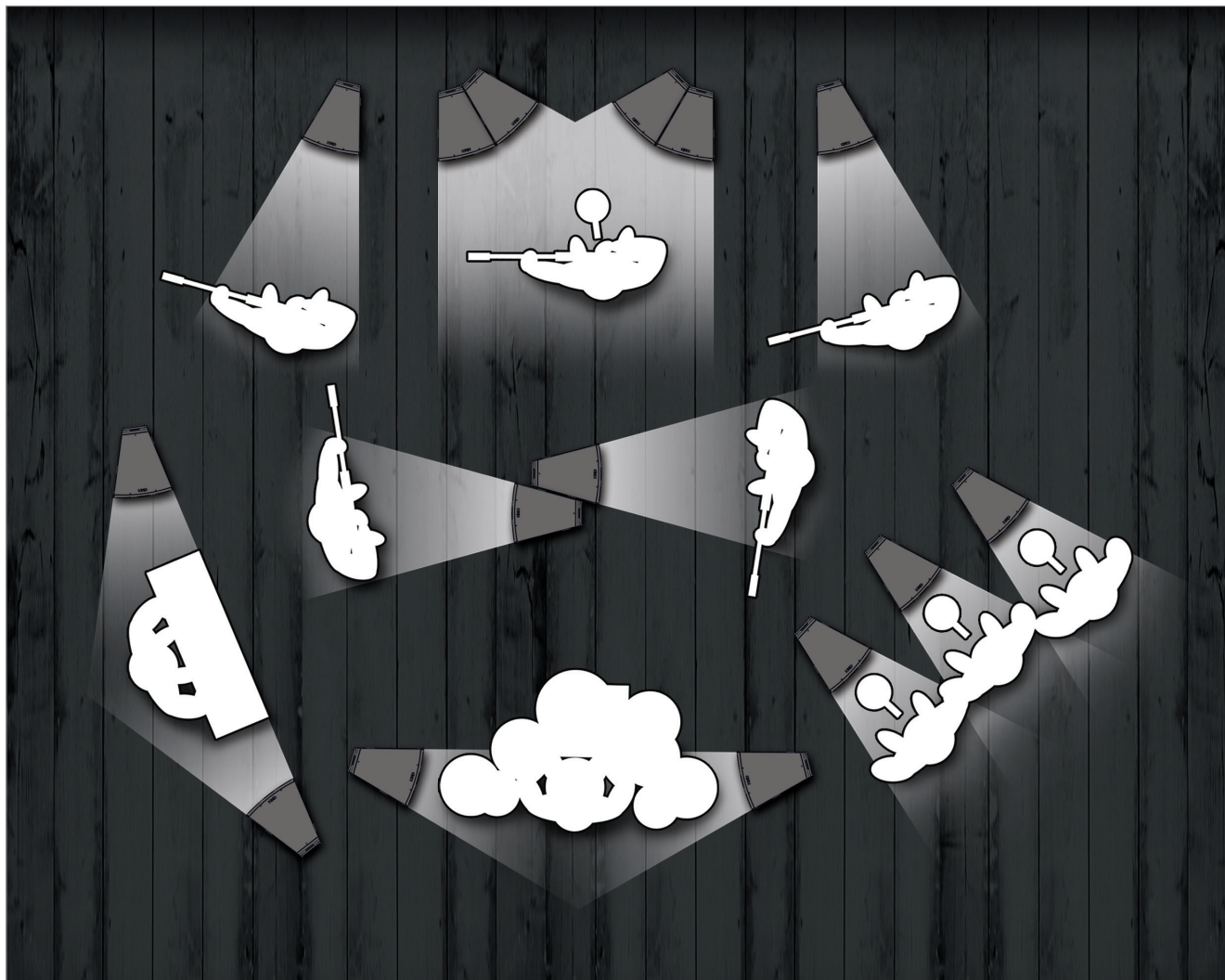
Because the coverage is so focussed, monitoring with the 45N12 often results in lower acoustic power on stage, making it easier to achieve a good front of house mix. The compact, low-profile design is less

conspicuous than conventional monitors, making the 45°N12 ideal for live TV production, and the cabinet features a non-slip base with a skid system and ergonomic handle for easy repositioning on stage.



The only monitor you'll ever need.

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12



Any stage. Any musician. NEXO 45°N12 is the only monitor you need.

Time was when sound contractors and rental companies had to carry truckloads of different monitors to be prepared for any eventually.

45°N12 changes all that. Because cabinets can be locked together in monitor arrays with no interference between wavefronts, the 45°N12 is a

flexible, one box solution for any stage monitoring application – delivering consistent SPL and frequency response within a tightly-focused area. Cabinets can even be locked back to back, allowing musicians to face one another.

A single, scalable monitoring reference,  
meeting the requirements of all musicians.





## Specifications

# 45N<sup>12</sup>

### 45°N12 PRODUCT FEATURES

Components	LF 1 x 12" (30 cm) high excursion Neodymium 8Ω driver. HF 1 x 3" voice coil, 1.4" throat Neodymium 16Ω compression driver on a 22.5° hyperboloid reflective wavesource.
Height x Width x Depth	392 x 492 x 576 mm (15.43" x 19.37" x 22.67").
Net Weight	24 kg (53 lbs).
Connectors	2 x NL4MP Speakon 4 pole.
Construction	Main structure: Baltic Birch Ply finished with structured black coating. Rear lower and bottom section: Steel with dark grey coating. Front vents and rear upper section: Injected polyurethane front vents, black coating.
Fittings	4 handles (2 side metal recessed, 2 front and rear moulded).
Front Finish	Perforated dark grey metal grille.
Locking Elements	Integrated magnets for mechanical locking.

### SYSTEM SPECIFICATIONS 45°N12 with NX TDCController

Frequency Response [a]	55Hz - 19kHz ±3dB.
Usable Range @-6dB [a]	50Hz - 20kHz.
Sensitivity 1W @ 1m [b]	106dB SPL Nominal / 104dB SPL Wideband.
Nominal Peak SPL @ 1m [b]	1 unit: 137 to 140dB Peak / 2 units: 140 to 143dB Peak.
HF Dispersion [c]	30° Horizontal - Scalable 30° steps when arrayed. 22.5° Diagonal (Coupling Plane) - Scalable 22.5° steps when arrayed. 60° Vertical (Asymmetrical -45° / +15°).
Crossover Frequencies	LF-HF: 1kHz Active or Passive (internally configurable).
Nominal Impedance	Active LF 8Ω, HF 16Ω. Passive 8Ω.
Recommended Amplifiers	Active LF 1000 to 1500 W 8Ω / HF 250 to 500 W 16Ω. Passive 1200 to 2000 W 8Ω.

### SYSTEM OPERATIONS

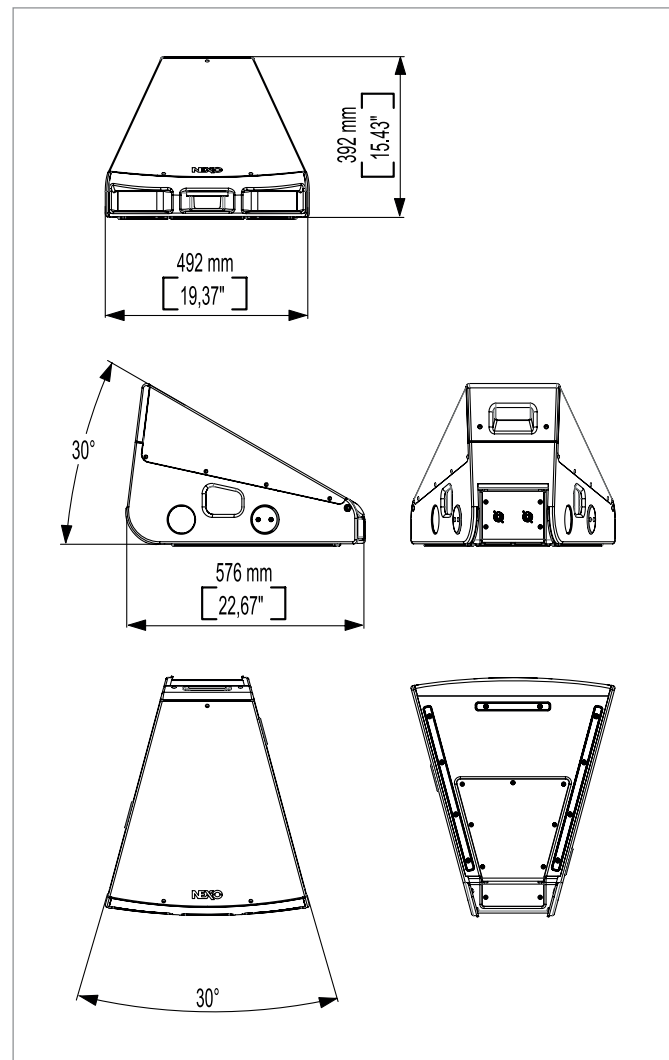
Electronic Controller	The NEXO TDCController's presets are precisely matched to the 45°N Series cabinets and include sophisticated protection. Using 45°N Series cabinets without a properly connected NEXO TDCController will result in poor sound quality and can damage components.
Dispersion configuration	Internally mounted magnets allow 45°N12 inter-cabinet locking for coverage / SPL scalability.
Sub-bass	LS600 extends system low frequency response down to 38 Hz.
Speaker Cabling	Active: 1/1*:LF; 2/2*: HF. Passive: 1/1*: Not Connected; 2/2*:LF + HF.

As part of a policy of continual improvement, NEXO reserves the right to change specifications without notice. [a] Response curves & data : Half-Space Far Field for the 45°N12 + NXTD. [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.

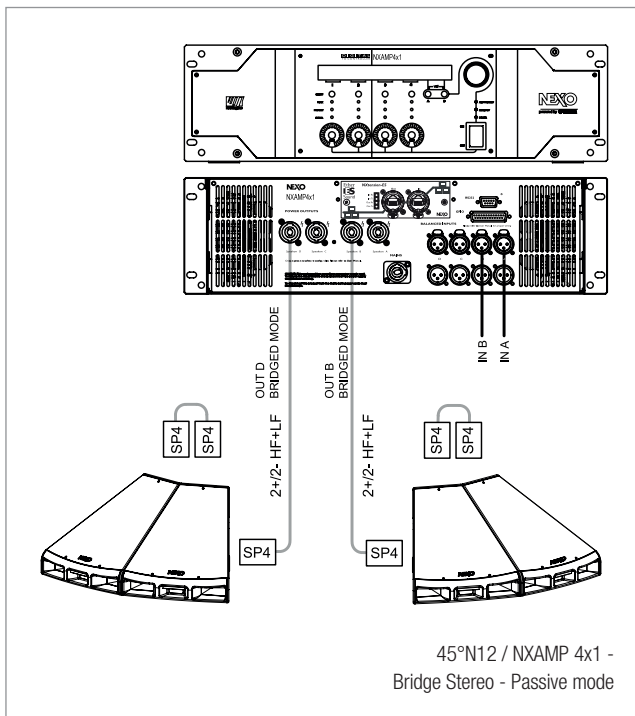
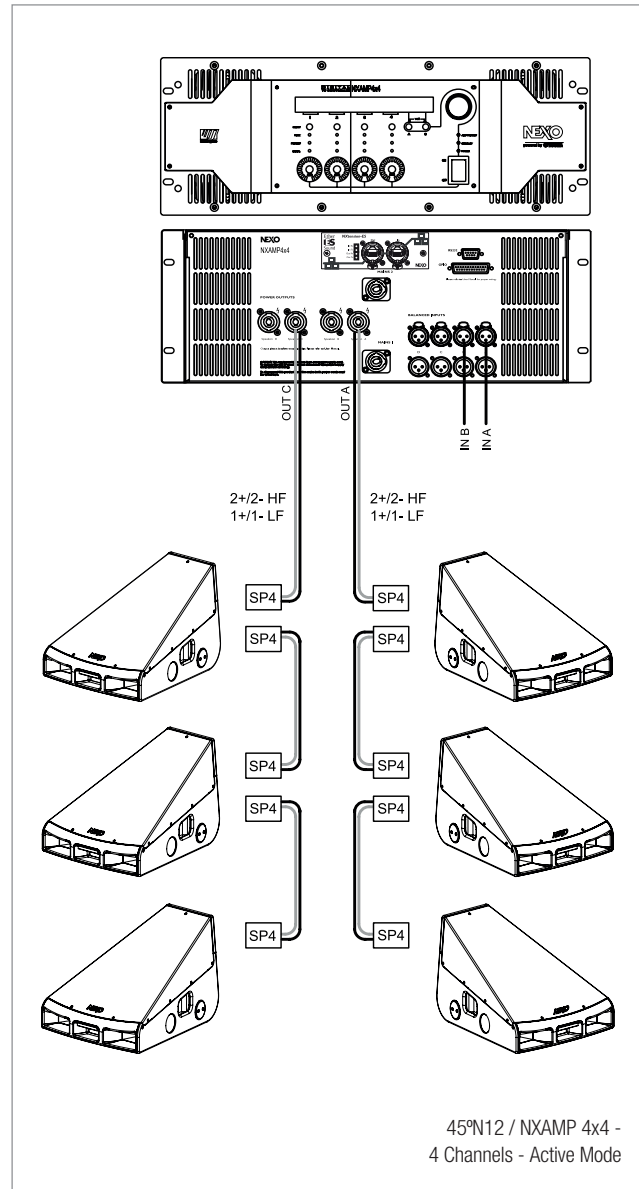
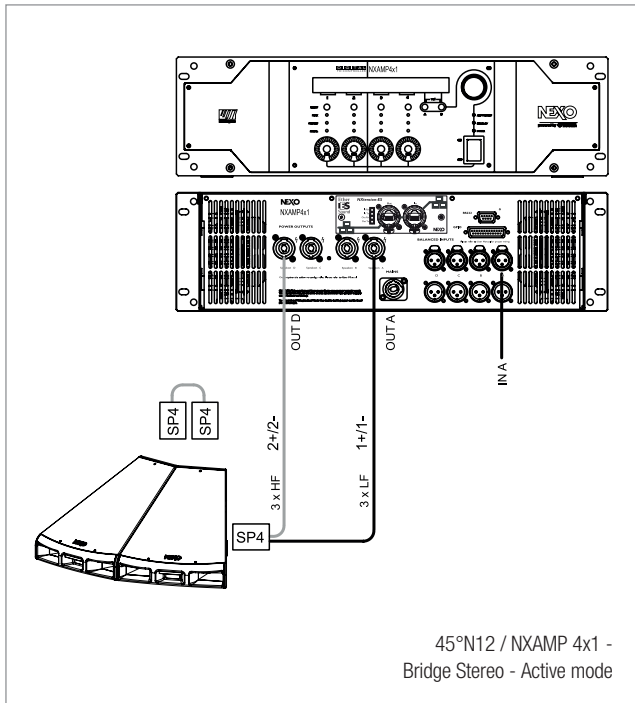
E&OE April 2011

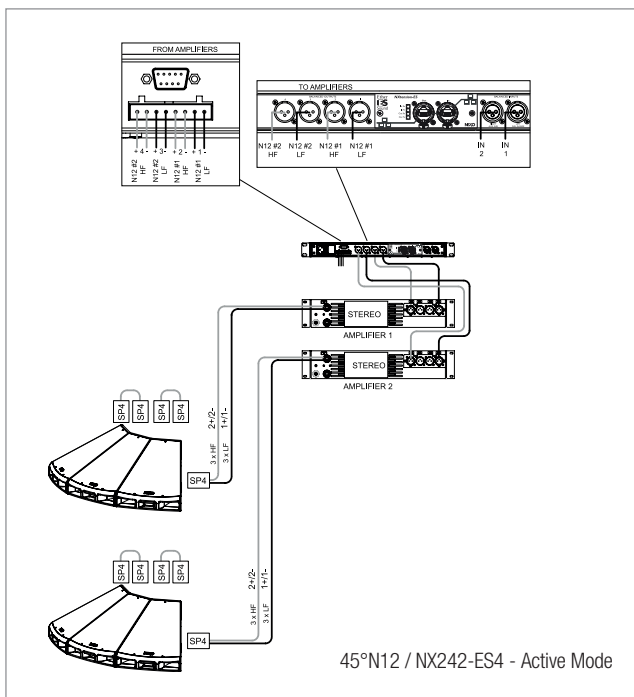
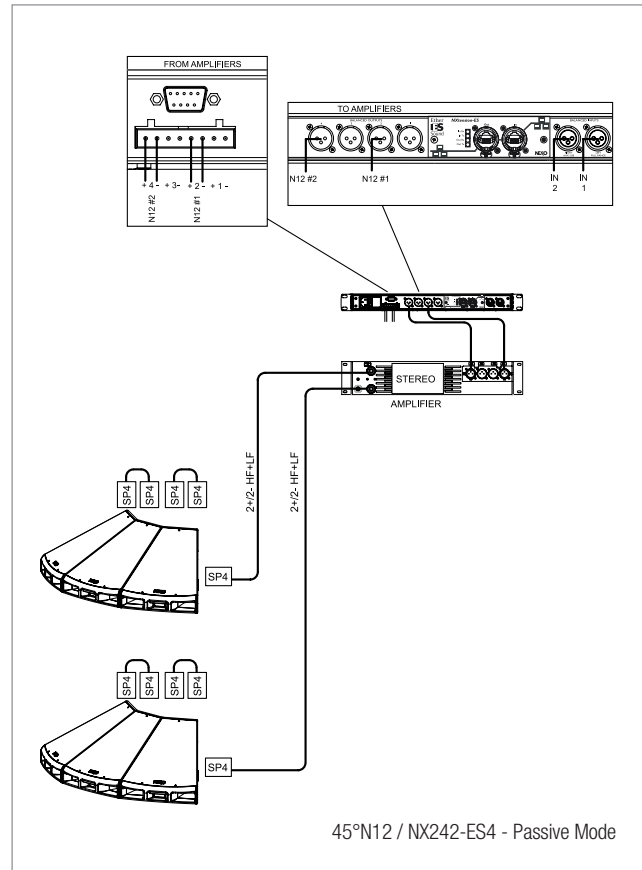
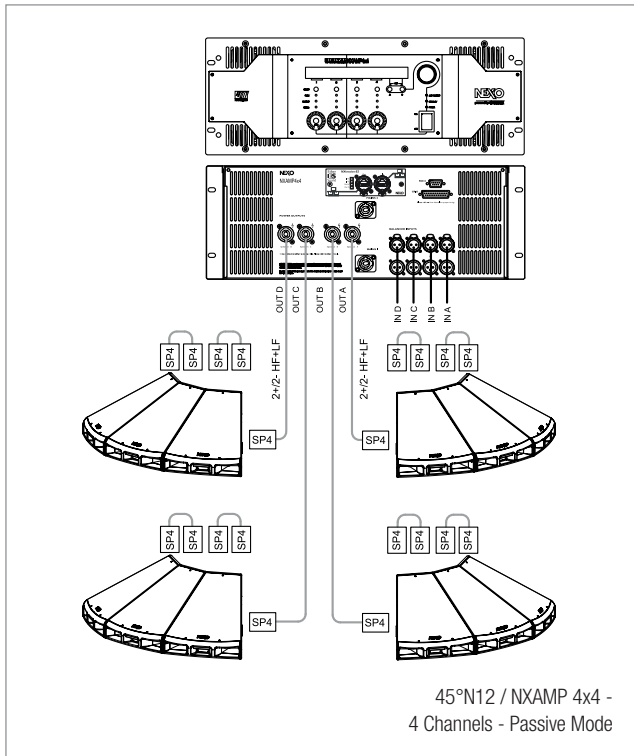
### Key Features

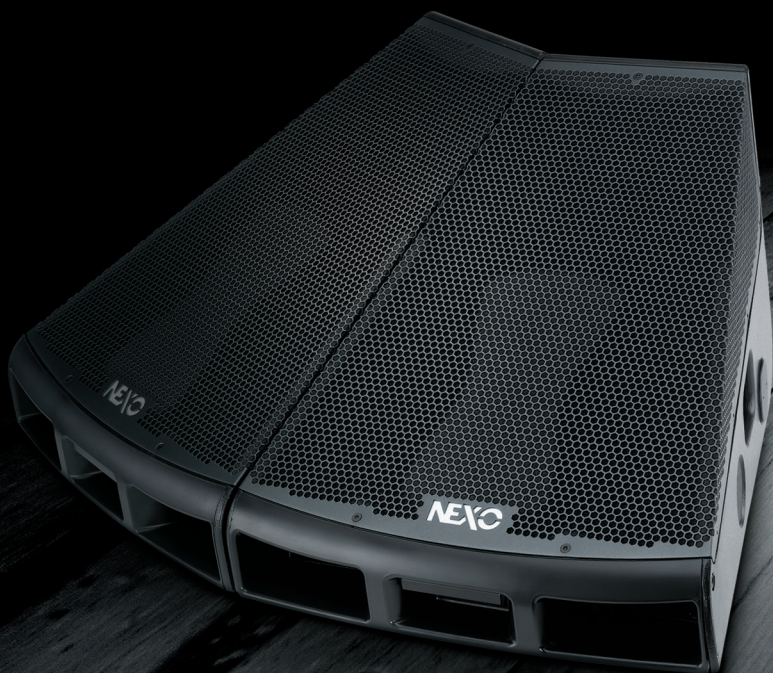
- World's first line monitor.
- Can be joined together into arrays to provide a scalable solution for wider coverage and higher SPLs.
- Very high headroom before feedback.
- Focuses coverage only where needed for lower acoustic power on stage.
- Discreet, low profile design.
- Ingenious magnetic locking system.
- Non-slip base with skid system and ergonomic handle for easy repositioning on stage.



# Connection diagrams





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