The revolutionary NEXO 45ºN12 brings all the benefits of line array technology to stage monitoring. Incorporating a number of groundbreaking technologies, the 45ºN12 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 45ºN12 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’.

Any Stage. Any Musician. One Monitor.
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 45ºN12 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 45º. 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.

Managing this locking system is easy. The 45ºN12 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.

As is the case with all NEXO systems, the 45ºN12 is controlled, powered and monitored by dedicated NEXO TDControllers. NXAMP 4x1 and NXAMP 4x4 Powered Digital Controllers provide convenient and optimised control and amplification for 45ºN12s in multiple configurations (see pages 10/11).

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

Bringing the benefits of line array technology to the stage.

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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 45ºN12 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 45ºN12 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.

High Frequency dispersion is 30º horizontal, 22.5º diagonal (coupling plane) and 60º vertical (asymmetrical -45° / +15°). Horizontal and diagonal dispersion is scalable in steps of 30º and 22.5º respectively when arrayed. SPL and frequency response are consistent up to 2.5 metres back.

Any stage. Any musician. NEXO 45ºN12 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. 45ºN12 changes all that. Because cabinets can be locked together in monitor arrays with no interference between wavefronts, the 45ºN12 is a flexible, one-box solution for any stage monitoring application – delivering consistent SPL and frequency response within a tightly-focussed 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

**45ºN12 PRODUCT FEATURES**

- **Components**
  - LF 1 x 12" (30 cm) high excursion Neodymium 8 Ω driver.
  - HF 1 x 3" neo coil, 1.4" throat Neodymium 16 Ω 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.
- **Weight Distribution**
  - 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 45ºN12 with NX TDController**

- **Frequency Response**
  - LF: 55Hz - 19kHz ±3dB.
- **Usable Range @-6dB**
  - 50Hz - 20kHz.
- **Sensitivity 1W @ 1m**
  - 106dB SPL Nominal / 104dB SPL Wideband.
- **Nominal Peak SPL @ 1m**
  - 1 unit: 137 to 140dB Peak / 2 units: 140 to 143dB Peak.
- **HF Dispersion**
  - 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 8 Ω, HF 16 Ω Passive 8 Ω.
- **Recommended Amplifiers**
  - Active LF 1000 to 1500 W 8 Ω / HF 250 to 500 W 16 Ω.
  - Passive 1200 to 2000 W 8 Ω.

**SYSTEM OPERATIONS**

- **Electronic Controller**
  - The NEXO TDcontroller's presets are precisely matched to the 45ºN Series cabinets and include sophisticated protection.
  - Using 45N Series cabinets without a properly connected NEXO TDController will result in poor sound quality and can damage components.
- **Dispersion configuration**
  - Internally mounted magnets allow 45ºN12 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 45ºN12 + NXTD. [b] Sensitivity 4% SPL, 1% diff. These will depend on spectral distribution and external placement of program material. Measured with pink limited Pink Noise. Nominal refers to Voice Decade (300Hz - 3kHz), 1/3oct to the specified ±3dB range. Data are for speaker + processor + recommended amplifier combinations. Peak SPL at clipping of recommended amplifier. [c] Directivity curves & data: Obtained by computer treatment of off-axis response curves.

**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.
- Passive coverage only where needed for lower acoustic power on stage.
- Discreet, low profile design.
- Ingenious magnetic locking system.
- Non-slip base with stabil system and ergonomic handle for easy repositioning on stage.