



### EN54-24 certified speaker, 2 way passive, with high excursion 12" LF and 1.7" diaphragm HF.

The ePS12-EN54 speaker is a highly powerful installation dedicated point source.

#### ePS12-EN54 main features

- High power (133 dB peak) point source dedicated to fixed installation markets, with or without its companion sub the eLS18.
- Lightweight (18 kg / 40 lbs) design using robust 15 mm Birch plywood enclosure.
- NEXO's Asymmetrical Dispersion Constant Directivity horn design ("PS" Horn), rotatable.
- IP55 protection level and enhanced all-weather resistance.
- EN54-24 certified for installation requiring this level of certification.

NEXO has always been well-known for its compact and very powerful versatile point source speakers, notably the worldwide reference PS Series.

This expertise is now applied to the ePS12-EN54, featuring a high excursion Neodymium 12" speaker coupled with a 1.7" diaphragm compression driver, in a slick and discrete design.

#### Advanced NEXO technology included

The ePS12-EN54 enclosure uses a 15 mm birch plywood shell. The result is a robust lightweight cabinet with exceptionally good sound quality. IP55 protection level is reached.

Its bass reflex acoustic design offers a very clean and deep low end response even at high levels.

The high excursion 12" LF driver uses a 3.0" voice coil while the HF compression driver has a 1.7" diaphragm, both ensuring a high peak output level.

The heart of the ePS12-EN54 is its Asymmetrical Dispersion Constant Directivity horn design, also known as the "PS" Horn.

#### Precise matching directivity

A satisfactory audience experience often necessitates compromise between the wide, short throw coverage required by listeners closest to the stage, and the narrow, long throw coverage required by those at the back of the venue.

The asymmetrical horns in ePS speakers are engineered so that vertical coverage is narrower above the horn axis than below. Easy for the user to rotate, this ensures optimum directivity for any fixed installation.

The connection at the back of the speaker is done through two (in/out) pairs of quick connect terminal blocks, while the included IP cover protects the connectors from moisture in outdoor applications.

#### Enhanced all-weather resistance

On top of the EN54-24 certification, dealing with product reliability and sonic repeatability to ensure always the same level of audio performances for safety installation, a ruggedized design ensure a long product lifetime including under severe conditions.

From stainless screws to UV-protected front cloth and polyurethane coating, the product have gone through world-class robustness tests : 800 hours salt spray test (ISO 9227 standard), 600 hours UV test (DIN 75220 standard).

#### Perfect phase alignment

ePS12-EN54 acoustic phase response is NEXO phase signature allowing inter-operability between all NEXO speakers at all crossover points, except for the monitor setups where latency is minimized.



Grille removed, the large PS horn used with the HF driver

NEXO is one of the world's leading sound reinforcement loudspeaker manufacturers. Founded in 1979, the company is dedicated to crafting practical solutions with solid engineering. Each new design begins with a proprietary sophisticated computer simulation process that allows every parameter to be extensively modeled and simulated, leading to breakthrough cost and performance gains. NEXO's comprehensive product line includes loudspeakers, analogue and digital control electronics and amplification; all designed to deliver consistent sound quality and long term reliability for a broad range of applications.

### EPS12-EN54 WITH NEXO PROCESSING

Frequency Response @-6 dB	60 Hz to 20 kHz
Sensitivity 1W@1m	103 dB SPL Nominal
Peak SPL@1m	133 dB
Vertical Dispersion	+25°/-30°
Horizontal Dispersion	50° to 100° asymmetrical
Crossover Frequency	60 Hz, 85 Hz, 120 Hz
Nominal Impedance	8 Ω
Recommended Power	600 to 950 Watts / 8 Ohms

### PRODUCT FEATURES

Number of ways	2 way passive
LF Component	12" 8 Ohms long excursion neodymium driver
HF Component	1.7" diaphragm 8 Ohms HF driver on an Asymmetrical Dispersion ("PS") horn
Connectors	2 pairs (In/Out) of 5 mm pitch Push-in Cage Clamp terminal blocks (+/- poles)
Compatible cables section	Cables from 0.2 mm <sup>2</sup> to 4 mm <sup>2</sup> (AWG 24 to 12) copper section
Compatible cables outside diameter	Cable with maximum outside diameter of 11 mm
Rigging points	3x M6 - 70 mm pitch rigging points (back) + 2x extra M6 and 1x M10 (top/bot)
Material	15 mm thick birch plywood body with polyurethane coating and galvanized grill
Finish	Black structural paint (RAL9005 or Custom RAL upon request)
Front Finish	Galvanized grill in front of UV & Fire resistant acoustic fabric
Height x Width x Depth	600mm x 370mm x 317mm (23.6" x 14.6" x 12.5")
Weight: Net	18 kg (40 lbs)
Operating temperature range	-40° C - 70° C (-40° F - 158° F) <sup>(1)</sup>
Storage temperature range	-20° C - 60° C (-4° F - 140° F)
IP Rating	IP55

### SYSTEM OPERATION

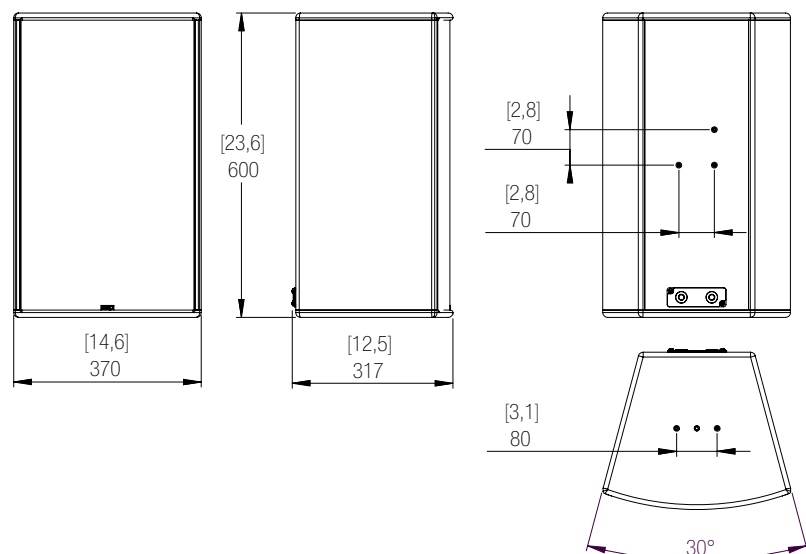
Recommended powering solution	NXAMP4x1mk2 Powered TDcontroller: 1 x ePS12 per channel
Optional powering solution	DTDcontroller + DTDAMP4x0.7 : 1 x ePS12 per bridged channel
	DTDcontroller + DTDAMP4x1.3 : Up to 2 x ePS12 per channel
	NXAMP4x2mk2 Powered TDcontroller: Up to 4 x ePS12 per channel
	NXAMP4x4mk2 Powered TDcontroller: Up to 4 x ePS12 per channel

### EN54-24 SYSTEM SPECIFICATIONS<sup>(2)</sup>

Nominal Impedance	3 Ohms
Nominal Continuous Voltage	35 Vrms
Nominal Continuous Power	400 Watts
Sensitivity 1W@4m	78 dB SPL
Max Continuous Sound Pressure @4m	104 dB SPL

(1) When used below 0° C (32° C) a low level audio signal must continuously be fed to the speaker.

(2) The EN54-24 standard uses different methods than NEXO to compute speakers datas.



NEXO S.A.  
 Parc d'Activité  
 du Pré de la Dame Jeanne  
 B.P. 5  
 60128 PLAILLY  
 Tel: +33 (0) 3 44 99 00 70  
 Fax: +33 (0) 3 44 99 00 30  
 e-mail: info@nexo.fr

# NEXO

nexo-sa.com

### LIMITED WARRANTY

NEXO loudspeakers and electronics are covered against defects in workmanship or materials for a period of five (5) years from the original date of purchase. At the option of NEXO the defective item will be repaired/replaced with no charge for materials/labour. The item is to be adequately packaged and dispatched, pre-paid, to a NEXO authorised distributor/service centre. Unauthorised repair shall void the warranty. The NEXO warranty does not cover cosmetics or finish and does not apply to any items which in NEXO's opinion have failed due to used abuse, accidents, modifications or any type of misuse. All images and text herein are the property of NEXO SA, and deemed accurate, although specifications are subject to change without notice.