Installation Speaker Data Sheet



EN54-24 certified speaker, 2 way passive, with high excursion 10" LF and 1.4" diaphragm HF.

EPS10-EN54

The ePS10-EN54 speaker is a highly powerful installation dedicated point source.

ePS10-EN54 main features

■ High power (130 dB peak) point source dedicated to fixed installation markets, with or without its companion sub the eLS600.

■ Lightweight (14.8 kg / 32.6 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 ePS10-EN54, featuring a high excursion Neodymium 10" speaker coupled with a 1.4" diaphragm compression driver, in a slick and discrete design.

Advanced NEXO technology included

The ePS10-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 10" LF driver uses a 2.5" voice coil while the HF compression driver has a 1.4" diaphragm, both ensuring a high peak output level.

The heart of the ePS10-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 aligment

ePS10-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

EPS10-EN54

Installation Speaker Data Sheet

I



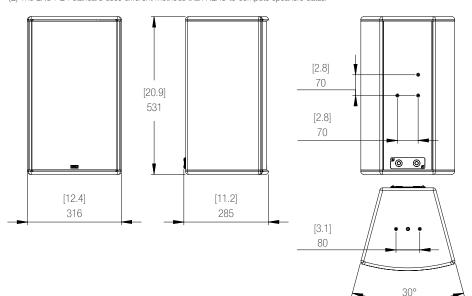
NEXO is one of the world's leading sound reinforcement loudspeaker manufacturers. Founded in 1979, the company is dedicated to crafting practical solutions with solid engineering. Each new design begins with a proprietary sophisticated computer simulation process that allows every parameter to be extensively 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.

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



EPS10-EN54 WITH NEXO PROCESSI	ING
Frequency Response @-6 dB	70 Hz to 20 kHz
Sensitivity 1W@1m	101 dB SPL Nominal
Peak SPL@1m	130 dB
Vertical Dispersion	+25°/-30°
Horizontal Dispersion	50° to 100° asymmetrical
Crossover Frequency	70 Hz, 120 Hz
Nominal Impedance	8 Ω
Recommended Power	500 to 800 Watts / 8 Ohms
PRODUCT FEATURES	
Number of ways	2 way passive
LF Component	10" 8 Ohms long excursion neodymium driver
HF Component	1.4" 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 ² to 4 mm ² (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 coataing 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	531mm x 316mm x 285mm (20.9" x 12.4" x 11.2")
Weight: Net	14.8 kg (32.6 lbs)
Operating temperature range	-40° C - 70° C (-40° F - 158° F) ⁽¹⁾
Storage temperature range	-20° C - 60° C (-4° F - 140° F)
IP Rating	IP55
SYSTEM OPERATION	
Recommended powering solution	NXAMP4x1mk2 Powered TDcontroller: 1 x ePS10 per channel
Optional powering solution	DTDcontroller + DTDAMP4x1.3 : Up to 2 x ePS10 per channel
	NXAMP4x2mk2 Powered TDcontroller: Up to 4 x ePS10 per channel
	NXAMP4x4mk2 Powered TDcontroller: Up to 4 x ePS10 per channel
EN54-24 SYSTEM SPECIFICATIONS	2)
Nominal Impedance	4 Ohms
Nominal Continuous Voltage	32 Vrms
Nominal Continuous Power	250 Watts

(1) When used bellow 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.



77 dB SPL

101 dB SPL

LIMITED WARRANTY

Sensitivity 1W@4m

Max Continous Sound Pressure @4m

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.