

Micro Axial Series

MX4N

Compact speaker for fixed installation

Two way coaxial, bass reflex
12" ventilated cone driver, 66 mm voice coil
1" HF driver, 45 mm voice coil

Features

Exceptional size/power ratio
Sound reproduction accuracy
High level of reliability
Studied ergonomics for fixed installation

Applications

F.O.H application
Fixed Installation

Specifications

350 W AES
98 dB SPL @ 1W / 1m
8 Ohm
100° conical dispersion
24.4"x 16.5"x 13.7" (620 x 420 x 347 mm)
2 thermal protections

Mono amplification
Optional Processor
Optional Subwoofer

The MX4N is a two way full range compact loudspeaker designed for fixed installation purpose. The lo/mid section comprises a 12" cone driver installed in bass reflex. The mid/hi section comprises a 1" HF driver. The MX4N is equipped with a set of high coaxial speakers which confers a perfectly coherent sound field with a conical dispersion of 100°.

Directly declined from the DS12S, the MX4N integrates the same electro-acoustic set according to an ergonomics and many accessories designed specifically to answer all types of fixed installation constraints : trapezoidal shape (cut sides with 22,5°)

allowing vertical or horizontal positioning by one or two speakers with coupling bracket, special "L" shape for mural application, internal metal structure inserts and for safety, rigging system with clamp or indexing rail.

This rail allows multitude positions of adjustment in the vertical angle. Dedicated processors SPMX4, and LPMX4 make it possible to protect and optimize the operation of the MX4N in full range mode or combined with subwoofer.

APG recommend the following subwoofers : SUB12MX/N, SUB138P/S, SUB238S, TB115S or TB215S.



MX4N speaker

The MX4N offers a great flexibility in use: all types of Front of House, with or without subwoofer. This loudspeaker is characterized by a very advantageous size/power ratio and its high reliability during extreme operation. The ergonomics and the multiple additional options of the MX4N offer a perfect adaptability with all the architectural constraints: it can simply be put on the floor, suspended alone or in coupling configuration or fixed at the wall or the ceiling; it can receive special treatment for tropical environment or special colours coatings. As a speaker of main system, it is dedicated to medium size high precision applications.

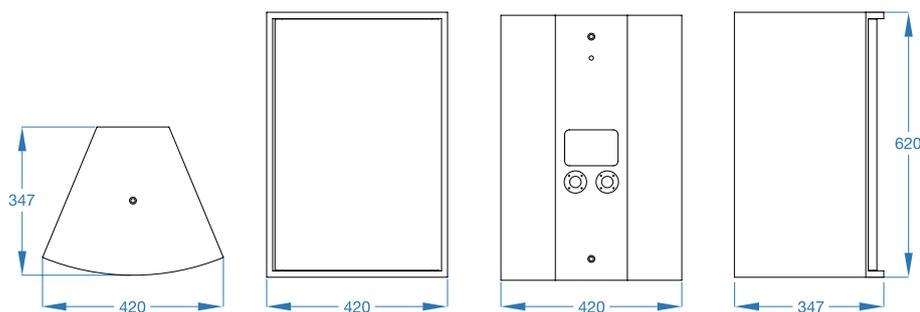
The MX4N can be used alone to offer high precision and clearness in vocal application. For music applications in full range mode, the use of a dedicated processor is mandatory in order to enhance the musical reproduction. Combined with subwoofers, the MX4N can make compact front of house systems providing with important dynamics, well adapted to sound clubs, cabarets or concert halls.

Dedicated processors SPMX4 and LPMX4 allow to manage a stereo system + subwoofer respectively without or with dynamic protection of the speakers.

APG

MX4N

Technical Specifications



Features

	Low section	High section
Frequency range with processor (± 3 dB)	55 Hz - 1100 Hz	1,1-18 kHz
Frequency range without processor (± 3 dB)	70 Hz - 1100 Hz	1,1-18 kHz
Sensitivity @ 1W / 1m	98 dB SPL	99 dB SPL (1)
Continuous dB SPL level @1m		124 dB SPL
dB SPL max level @1m (2)		130 dB SPL
dB SPL peak level @1m (3)		136 dB SPL
Directivity @ -6dB		100° conical (4)
nominal impedance		8 Ohm

Components

	Low section	High section
Transducers	1 x 12"	1 x 1" HF
Coil Diameter	2,6" (66 mm)	1,7" (45 mm)
Type of load	Bass reflex	Conical horn

Power

Recommended amplifier (5)	350 to 700 W
Peak	1200 W
AES (5)	350 W

Construction et characteristics

Cabinet	15 mm Birch plywood
Passive crossover	Air-core inductors, paper capacitor, wound resistors
Overload protection	Thermal circuit breaker with automatic reload
Finish	Black impact resistant aquarethane coating
Protection Grill	Acoustically transparent perforated steel, 1,5 mm thick
Front panel	Black, 10 mm acoustic foam
Connectors	2 x SPEAKON NL4MP (4)
Dimensions (H, W, D)	24.4"x 16.5"x 13.7" (620 x 420 x 347 mm)
Net unit weight	44 lb (20 kg)
Gross weight, packed	51 lb (23 kg)

Options and Accessories

FAERO4 (7)	4 Aeroquip™ flying rings
ETMX4 (8)	Lyre bracket for MX4N speaker
TROPIC02 (9)	Full treatment : wooden cabinet, screws and HP
T200	Line transformer 70V / 100V, 200W

Signal Processing

The SPMX4 processor provides frequency response optimisation, sub-and-ultra-sonic protection, active crossover and signal conditioning and distribution for a stereo system including subwoofers. In addition to the standard SPMX4 functions, the LPMX4 processor includes dynamic protection with simulation of operational limitation parameters, i.e. diaphragm displacement, voice coil temperature and amplifier clipping. This processor also allows optimisation of the phase alignment between the subwoofers and the main loudspeakers and feature a bank of switches to adapt the subwoofer being used. In stage monitoring applications, the SPR processor offers four channels of dedicated processing.

(1) The efficiency of 99dB is before attenuation. This attenuation not only makes it possible to linearize the system but also to increase the acceptable power in the section considered.

(2) AES2 Norm 1984.

(3) AES2 Norm 2012.

(4) Dispersion is controlled from 500 Hz. The angles given here are irrelevant below this frequency.

(5) In order to take full benefit of the dynamic performance, sonic quality and reliability of the speakers, the recommended amplification must at least correspond to the AES rating. Lesser amplification is acceptable for applications requiring less power (near-field, distributed systems,...), whilst not being less than half the AES rating. The AES power handling corresponds to a 2 hour test using weighted pink noise (peak factor of 6dB) through a frequency range of one decade.

(6) The 4 pins Speakon connectors are wired 1+, 1- in Lo/LoMid and 2+, 2- in Mid/Hi.

(7) AEROQUIP™ system to allow speaker installation with safety slings.

(8) ETMX4 is a 4 mm steel bracket allowing installation of speakers on either wall or ceiling with angle adjustment.

(9) Tropicalisation includes fiber-glass reinforced polyester coating of the cabinet, stainless steel screws and waterproofing of speaker cones.

5 YEARS WARRANTY
 *A five years warranty covers passive filters, transducers and compression drivers. The warranty does not cover cosmetic damages and damages due to misuse, improper installation, or damages caused by alterations.

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