

Dispersion Series

DX12

Multi purpose compact speaker

2-way coaxial, passive cross over
1 x 12" Neodymium (3" coil)
1 x HF1" Neodymium (1,75" coil)

Features

Clarity and sound precision
Frequency and phase linearity
Compactness and low profile
Compatibility with DX15
"All inclusive" ergonomics

Applications

Nearfield and mid-range listening
Main FOH or additional reinforcement
High precision stage monitoring
"Touring" and mobile installations

Specifications

400 W AES
98 dB SPL @ 1W à 1m
520 x 495 x 265 mm
8 Ohm
90° @ -6dB conical opening

Mono amplification
Dedicated processor recommended

The DX12 is a two way, compact wide band multipurpose speaker. The mid/low transducer is a 12" neodymium bass reflex. The DX15 takes advantage of a proprietary technique of forced thermal transfer, which drastically reduces thermal compression effects, resulting in exceptional sound pressure capacity down to 60Hz. The high frequency section comprises a HF 1" neodymium compression driver offering extremely low distortion and frequency extension up to 19kHz.

The passive filtering is designed to manage the phase alignment of the speakers and to obtain amplitude and linear phase responses in with a crossover that limits the distortion ratio. The original cabinet design naturally enables two different angles as a floor monitor (30° for near-field and 45° for far-field applications), or it may be pole-mounted or flown for use as a FOH, delay or in-fill system. It also integrates 2 handles for quick and easy handling in all positions and cable plugs are protected. The 12APT90 option is an angle tuning plate with the ETDX12 bracket that is hidden in the sides of the cabinet. The QFS4 comprises 4 parts for a quick and secure hanging with bolts or pins. The DX12 works in mono amplification and requires the use of an APG processor in the musical high power applications. For low and very low frequency reinforcement, the following subs are recommended: SB115, TB115S or TB215S.



Multi purpose DX12 speaker in FOH and floor monitor

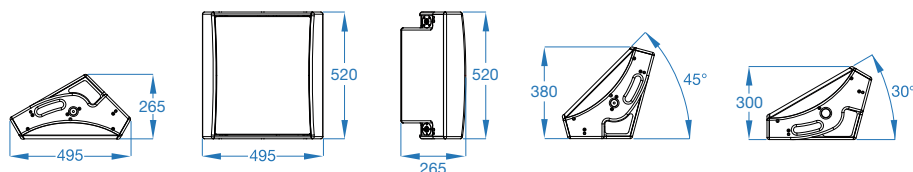
The DX12 is a compact, versatile, coaxial monitor speaker. It combines high acoustic performance with sophisticated and functional ergonomics. Thanks to the coaxial coupling of 12" and 1" drivers, the DX12 offers a very high acoustic definition and an excellent size/power ratio. The DX12 uses the same 1" driver as the DX15, in order to make the two products compatible and complementary, respecting the same criteria of linearity in frequency, phase and power. The asymmetric cabinet design enables two different angles as a floor monitor (30° for near-field and 45° for far-field applications), or it may be pole-mounted or flown for use as a FOH, delay or in-fill system. When combined with subwoofers The DX12 meets professional requirements in terms of versatility, compactness, light weight, and handling. It offers a low profile as a stage monitor, simple flying system, ultra-fast setup, and fully protected cables and plugs etc.

In wide band use, the DX12 is perfectly suited to vocal applications and stage monitoring, distributed systems or as a FOH complement (delay or front fill). Because of the size of its transducers, the DX12 is also ideal for high precision stage monitoring in jazz and acoustic music. When combined with subwoofers, the DX12 becomes a powerful, compact and easily transportable system ideal for medium-throw FOH applications.

APG

DX12

Technical Specifications



Features

	Low section	High section
Frequency response with processor (± 3 dB)	63 Hz à 1600 Hz	1600 Hz à 19 kHz
Frequency response without processor (± 3 dB)	75 Hz à 1600 Hz	1600 Hz à 19 kHz
Sensitivity @1W -1m, f>80 Hz	98 dB SPL (1)	
Max continuous level @1m, f > 80 Hz	124 dB SPL	
Peak level @1m, f > 80 Hz	130 dB SPL	
Dispersion angle	90° conical (2)	
Nominal impedance	8 Ohm	

Components

Transducers	1 x 12" ND with ventilated driver	1 x 1" HF ND driver
Coil diameter	75 mm (3")	45 mm (1.75")
Type of load	Bass reflex	Conical Horn

Power

Recommended amplifier	300 to 800 W
Peak	1600 W
AES (3)	400 W

Construction et characteristics

Cabinet	15 mm Finnish Birch plywood
Passive crossovers	Air-core inductors, paper capacitors, wound resistors
Overload protection	Two thermal circuit breakers with automatic reload
Finish	High resistance black textured aquarethane coating
Front panel	Acoustically transparent perforated steel, 1.5 mm thick (5 mm acoustic foam)
Connectors	2 SPEAKON NL4MP (4)
Handles	2 x integral cut-out handle
Fittings	1 x 36 mm, pole mount socket
Dimensions (H,W,D)	20.4" x 19.4" x 10.4" (520 X 495 X 265 mm)
Net weight, unity	41.9 lb (19 kg)
Gross weight packed	48.5 lb (22 kg)

Options et Accessories

12ATP90 (5)	Angle Tuning Plate (0° - 90°) for ETDX12
ETDX12 (5)	Quick rigging lyre bracket for DX12
QFS4 (6)	4 integrated steel quick rigging parts
FC2DX12	Flight Case for 2 x DX12
FC4DX12	Flight Case for 4 x DX12

Contact us for all painting or waterproof adaptation (7)

Signal processing

The SPX12 processor provides active crossover, system alignment, infrasonic and ultrasonic protection, standard filtering and distribution functions for a stereo system including use of APG subwoofers.

The LPDX12 processor includes in addition to the standard SPX12 function, simulation of operating parameters that allows control of diaphragm displacement, voice coil temperature and amplifier clip. This processor also features a keyboard to select the type of APG subwoofer used with the DX12.

Digital APG processors provide complete digital signal processing for all kinds of system configuration. APG France provides presets according to applications

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We have included a High and Low Section in the features table although it is unusual to illustrate this in the specifications of a passive system such as the DX12. From this information it is possible to calculate the precise amount of energy reproduced by each transducer, and also the frequency bands within which they operate.

(1) Power shaping optimises system linearity and increases power handling in the given frequency range. Sensitivity measures 110 dB before power shaping and 99dB afterwards.

(2) Dispersion is controlled from 1000 Hz. The angles given here are irrelevant below this frequency.

(3) 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.

(4) SPEAKON connectors are wired hot pin 1+, cold pin1- (2+ and 2- are not connected).

(5) ETDX12 is a 4 mm steel bracket allowing installation of speakers on either wall or ceiling with angle adjustment.

(6) The QFS4 option offers 8 rigging points thanks to screwed rings or quick release pins.

(7) The DX12 can be provided with custom color (PENTONE or RAL ref). Two levels of waterproof protection can be applied depending on the environment.

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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APG has a comprehensive research and development policy for the continual improvement of its products and service.

Due to this, new materials, manufacturing methods and technological changes may be introduced without prior notice. As a result, an APG product can differ from its published description in certain areas. However, unless otherwise indicated, its characteristics will always equal or better the published specifications.

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