

## Dispersion Series

### Multipurpose Compact Loudspeaker

Two-way coaxial bass reflex  
1 x 15" LF bass reflex driver, 4" voice coil  
1 x 2" coaxial HF driver, 3" voice coil

### Features

Versatility FOH / stage monitor  
Exceptional size / power ratio  
High level of reliability

### Applications

F.O.H of all types  
High power monitor  
Side-fill  
Very high power application  
Long throw systems reinforcement

### Specifications

1000 W AES  
103 dB SPL@1W, 1m  
8 Ohm  
85° conical opening  
25.2" x 18.5" x 15" (640 x 470 x 380 mm)  
Two thermals protections

Mono amplification mode  
Processor required  
Optional Subwoofer

The APG DS15S is a two-way very high power full range loudspeaker. The low/mid section comprises a 15" vented driver mounted in Bass reflex. The high section comprises a high efficiency, high power 2" HF driver.

Like the other APG Dispersion series, the DS15S uses a coaxial loudspeaker set that provides a very coherent acoustic field with 85° conical dispersion. The cabinet features a 45° slant panel, to use the DS15S as a stage monitor, and a pole mount socket for F.O.H. installation.

The wooden enclosure features a 36 mm pole mount socket and a built-in metal bar handle.

FAREO4 option comprises the adaptation of 4 rings AEROQUIP™. Two threaded inserts are also standard equipment, allowing the use of a 4 mm steel bracket for fixed installation on wall or ceiling (option ETDS15).

The dedicated processor LPDS15S offer active protections to the DS15S in full range mode (on stage monitor application or F.O.H) and when combined with subwoofers.

APG team recommends the following subwoofers: SUB238S, TB115S, TB118S, TB215S or TB218S.

# DS15S



DS15S shown in FOH and stage monitor settings

The DS15S offers total flexibility between stage monitor and F.O.H applications, with or without subwoofers. It stands out by its high efficiency and high dynamic capacity that creates an acoustic pressure/size ratio very uncommon on the market with peak level up to 136 dB SPL. The DS15S is recommended for large size areas and as delay complements in large P.A. systems.

The specific passive filtering included in this speaker allows to reduce distortion levels and aggressivity of compression driver commonly found in competitors loudspeakers when used in high level power.

The DS15S can be installed in many ways, wall or ceiling-mounted with its steel bracket, directly on a pole or simply put on a shelf. The DS15S can be fitted with an optional 70V-100V transformer when a large number of loudspeakers is required.

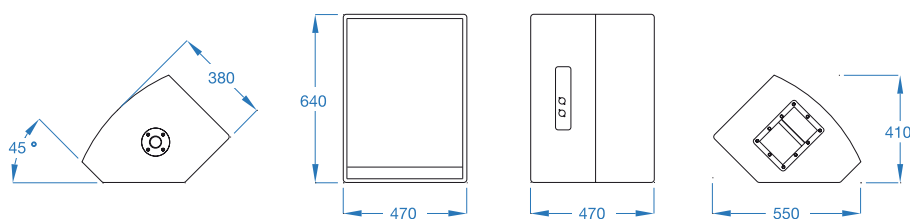
The design and the additional options, provide to this speaker a simple and easy installation. With the addition of subwoofers, it is capable of very high level performance in large-size venues

The LPDS15S processor offers to manage a FOH stereo + subwoofer.

# APG

# DS15S

## Technical Specifications



### Features

	Low section	High section
Frequency range with processor ( $\pm 3$ dB)	55 Hz to 1000 Hz	1000 Hz to 18 kHz
Frequency range without processor ( $\pm 3$ dB)	80 Hz to 1000 Hz	1000 Hz to 18 kHz
Sensitivity @1W 1m, $f > 80$ Hz	100 dB SPL	103 dB SPL (1)
Maximum continuous level at 1m, $f > 80$ Hz		130 dB SPL
Peak level at 1m, $f > 80$ Hz		136 dB SPL
Dispersion angle		85° conical (2)
Nominal impedance		8 Ohm

### Components

Transducers	1 x 15" coaxial with ventilated driver	1 x 2" HF coaxial driver
Coil diameter	100 mm (4")	75 mm (3")
Type of load	Bass reflex	Conical Horn

### Power

Recommended amplifier	1000 to 2000 W
Peak	4000 W
AES (3)	1000 W

### Construction and characteristics

Cabinet	18 mm Finnish birch plywood
Crossover	Air core inductors, plastic film capacitors, wire wound resistors
Circuit protection	Thermal circuit breaker with automatic reloads
Coating	Black, impact resistant aquarethane
Protection grill	Acoustically transparent perforated steel, 1.5 mm thick
Front panel	Black, 10 mm acoustic foam
Connectors	2 x SPEAKON NLM4P (4)
Handles	1 x built-in steel bar
Fittings	1 x 36 mm, pole mount socket
Dimensions (H, W, D)	25.2" x 18.5" x 15" (640 x 470 x 380 mm)
Net unit weight	68.4 lb (31 kg)
Gross weight, packed	74.9 lb (34 kg)

### Options and Accessories

FAERO4 (5)	4 Aeroquip™ flying rings
ETDS15 (6)	Lyre bracket for DS15 and DS15S speakers
INOX02 (7)	Stainless steel screws and waterproof treatment cone driver
TROPIC02 (8)	Full treatment : wooden cabinet, screws and HP
REPEINT04 (9)	Painting option according to RAL or PENTONE reference

### Signal Processing

The LPDS15S processor provide active crossover, EQ, speakers protection, standard filtering functions for a stereo system including subwoofers. This processor include the speaker protections functions by simulation of limitation parameters such as diaphragm displacement, voice coil temperature control and amplifier clip. This processor also allow to optimize the phase alignment between the subwoofers and the loudspeakers and feature a selection of switches to adapt the subwoofer being used.

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 DS15S. 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 optimizes system linearity and increases power handling in the given frequency range. Sensitivity measures 107 dB before power shaping and 103 dB afterwards.

(2) Dispersion is controlled from 800 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) The SPEAKON connectors are wired hot pin 1+, cold pin 1-.

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

(6) ETDS15 is a 4 mm steel bracket allowing installation of speakers on either wall or ceiling with angle adjustment.

(7) Stainless steel screws and waterproofing of speaker cones.

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

(9) Paint preparation for the requested color.

**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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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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