

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
Long throw systems reinforcement

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 ohms
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.

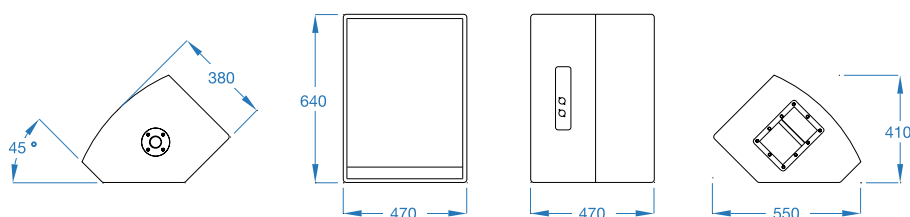
The design and the additional options, provide to this speaker a simple and easy installation. With the addition of subwoofers, it is capable of very high level performance in large-size venues

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

APG

DS15S

Technical Specifications



Features

| | Low section | High section |
|---|------------------|-------------------|
| Frequency range with processor (± 3 dB) | 55 Hz to 1000 Hz | 1000 Hz to 18 kHz |
| Frequency range without processor (± 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 ohms |

Components

| | Low section | High section |
|---------------|--|--------------------------|
| 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 | 3000 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 | 68,4lb (31 kg) |
| Gross weight, packed | 74,9lb (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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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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