Technical Data Sheet





Features

- Next-generation Dual Concentric driver featuring Omnimagnet technology
- Torus Ogive waveguide for improved broadband directivity
- 16-ohm drivers optimized for use with Lab.gruppen LUCIA amplifiers
- Yoke bracket included; optional any-angle accessory bracket available
- Weather resistant rated IP65 to EN60529 (IEC529)
- Thickened 4 mm high-temperature molded cabinets
- Custom color options

Applications

- Multi-zone foreground music and paging
- Boardrooms, offices and courtrooms
- Business music systems
- Airports, convention centres and hotels
- · Auxiliary systems in houses of worship
- Lounges and bars
- Cruise ships

Product description

The Tannoy AMS 5DC is a wide bandwidth, high power-handling and high sensitivity surface mount loudspeaker designed with an aesthetic that is perfect for the architectural considerations of building design. The elegantly styled moulded enclosures blend beautifully into any décor with custom colour available on special order. Additionally the AMS 5DC has undergone the most punishing environmental testing of any product in Tannoy's history – achieving an IP65 rating, which is among the highest in the industry for outdoor use.

Behind the unobtrusive, smoothly formed, weather-resistant zinc-plated nickel grilles and higher temperature polymer mouldings lies the technical heart of Tannoy's Dual Concentric Driver's revolutionary Omnimagnet™ technology and a unique patent-pending Torus Ogive Waveguide™ device. Together these innovations provide more consistent and controlled directivity along with improved high frequency response, as well as much improved time alignment and greater coherence between the low frequency and high frequency drivers.

This latest generation of Dual Concentrics have their genesis in many of the world's high end recording studios, with that classic signature Tannoy technology being used to mix and master a rich history of recording industry classics, including The Beatles' most treasured recordings in London's Abbey Road. By extension, the new AMS models ensure that playback of recorded material sounds exactly as the engineer intended when it was mixed in the studio, making them perfect for entertainment and hospitality venues, as well as areas where true sonic clarity and reliability is required.

The AMS range utilises a 16 ohm driver, making it ideal for use in high performance low-impedance systems (with optimized performance when used in conjunction with Lab.gruppen LUCIA amplifiers). Alternatively, for constant voltage systems, Tannoy have specified as standard, high quality low-insertion loss 30 W transformers featuring switching for taps at 30 W, 15 W and 7.5 W, with an additional 3.75 W tap for traditional systems

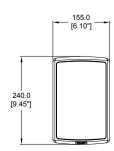
Physical data

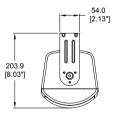
Dimensions (H x W x D): 248.0 x 155.0 x 203.9 mm, (9.77 x 6.10 x 8.03")

Net Weight: 3.25 kg (7.16 lbs)

Enclosure: ABS

Finish: Black or white



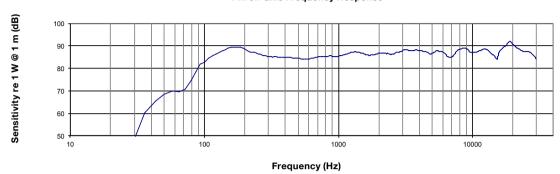






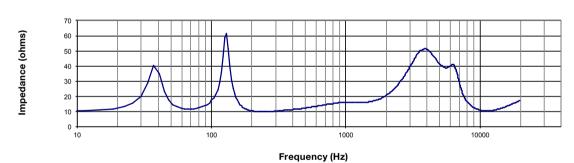
Performance measurements

1 m on-axis Frequency Response



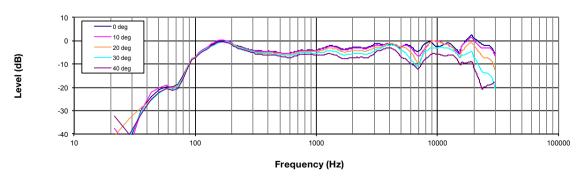
Anechoic Frequency Response

Impedance vs frequency



Impedance

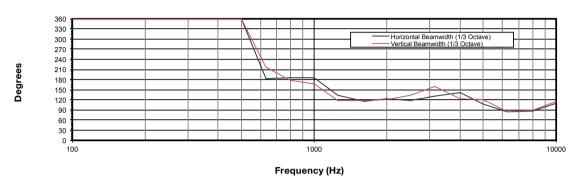
Off-axis Frequency Response



Off Axis Response

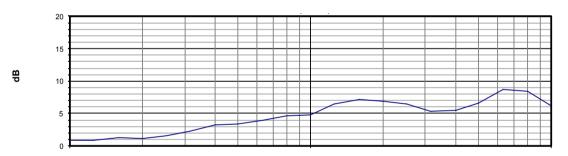
Performance measurements

Beamwidth vs Frequency



Beamwidth

Directivity Index (DI)



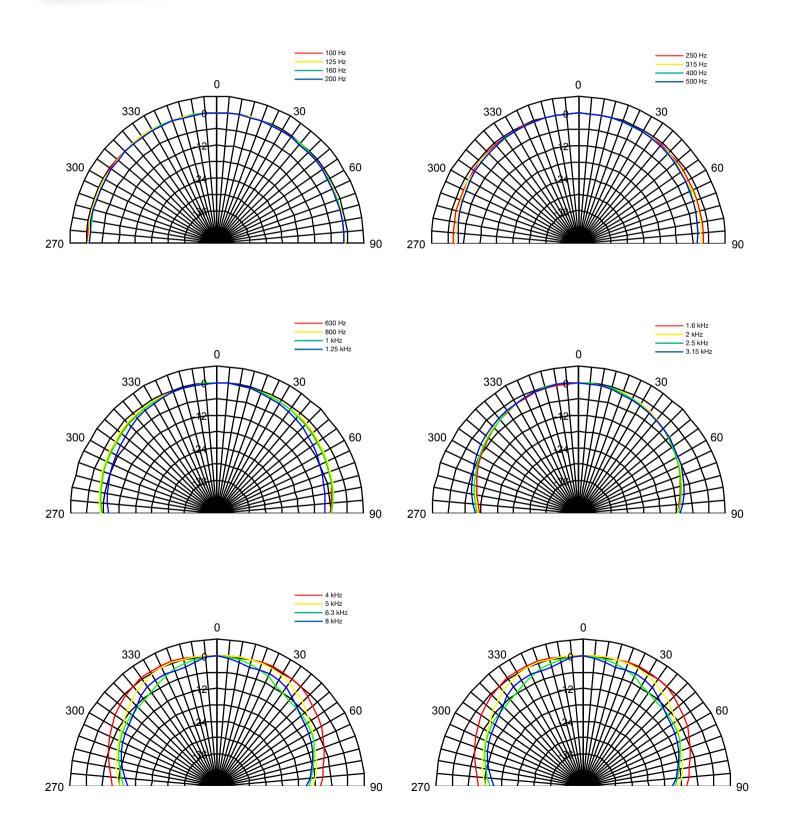
Frequency (Hz)

Directivity Index

AMS 5DC

Technical Data Sheet

Polar plots (1/3 octave)



Technical Data Sheet

AMS 5DC

Specifications

 Performance
 AMS 5DC

 System
 AMS 5DC

 Frequency response (-3 dB) (1)
 90 Hz - 30 kHz

 Frequency range (-10 dB) (1)
 80 Hz - 40 kHz

System sensitivity (1 W @ 1m) (2) 87 dB (1 W = 4 V for 16 Ohms)

Nominal Coverage Angle 90 degrees conical

Power Handling (3)

 Average
 60 W

 Programme
 120 W

 Peak
 240 W

Recommended Amplifier Power 120 W @ 16 ohms

Nominal Impedance (Lo, Z) 16 ohms

Rated maximum SPL

Average 105 dB Peak 111 dB

Transformer Taps (via front rotary switch)

70 V 30 W / 15 W / 7.5 W / 0FF & Low impedance operation

 $100\,\mathrm{V}$ $30\,\mathrm{W}\,/\,15\,\mathrm{W}\,/\,7.5\,\mathrm{W}\,/\,\mathrm{OFF}$ & Low impedance operation

Transducers

Dual Concentric™ point source driver

1x 130 mm (5.0") Dual Concentric™ driver, using Omnimagnet technology

Low Frequency

35 mm (1.38") voice coil, treated multi fibre paper pulp cone

High Frequency 20 mm (0.79") PEI dome

Physical
Enclosure ABS

Grille Steel, plated and painted

Connectors Removable locking connector with screw terminals

Transformer setting Rotary switch
Dimensions (H x W x D) 248.0 x 155.0 x 203.9 mm

(9.77 x 6.10 x 8.03")

Net Weight (ea) 3.25 kg (7.16 lbs)

Shipped weight 3.66 kg (8.07 lbs)

Included Accessories Yoke bracket

Packed Quantity 2

Ordering Information
Part Number Colour
8001 7945 Black
8001 7946 White



Notes:

- . Average over stated bandwidth. Measured in an IEC baffle in an Anechoic Chamber
- Unweighted pink noise input, measured at 1 metre on axis
- 3. Long term power handling capacity as defined in EIA 426B test

A full range of measurements, performance data, CLF and Ease™ Data for AMS 5DC can be downloaded from www.tannoypro.com.

Tannoy operates a policy of continuous research and development. The introduction of new materials or manufacturing methods will always equal or exceed the publishing specifications, which Tannoy reserves the right to alter without prior notice. Please verify the latest specifications when dealing with critical apolications.

Copyright (c) 2015 Tannoy Limited. All rights reserved.

Technical Data Sheet Notes

AMS 5DC

Technical Data Sheet Notes

AMS 5DC

Technical Data Sheet Notes

AMS 5DC