AMS Series

Surface mount **loudspeakers**





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1. Introduction

Thank you for purchasing this new AMS Series product. Designed for both speech and music program material, the Tannoy AMS range provides exceptional sonic quality and long-term reliability in all surface mount applications. The AMS range offers five models: three featuring a new generation of Dual Concentric™ drivers and two with an improved version of Tannoy's ICT™ technology. All new drivers have 16 ohm nominal impedance for optimized use with Lab.gruppen amplifiers. Other features include IP 64 rating for outdoor use, high-temperature molded cabinets and custom color options. All AMS loudspeakers include a built-in line transformer.

Because all AMS models are true point-source loudspeakers, they may be mounted horizontally or vertically without affecting performance. All models include a standard mounting yoke; a multi-angle accessory bracket is available as an option.

2. Safety Notices

Installation Safety Notice

- 1. The user is responsible for fixing the hardware to the surface to ensure safe operation. The fixings must support the weight of the product. Please consult the manual's specification page for the appropriate weights. Please consult the relevant construction codes in your region for further information on suitable hardware fixing methods.
- 2. Some regional construction codes require the use of a secondary method of securing loudspeakers to surfaces to provide security of a back-up support. A secondary support line should be attached from the safety loop on the rear of the product to a source point on the wall. Please consult the relevant construction codes in your region.
- 3. Tannoy will not be held accountable for any damage caused by incorrect installation.

Electrical Safety Notice

To comply with the standard UL1480, metal-clad flexible conduit (BX) is required for connection to the terminal block for proper earth grounding.

SAFETY NOTE: In order to comply with the relevant fire safety regulations (i.e. BS 5839:1998), it is required that in the event of fire, that failure of the circuit to which the loudspeaker is connected does not occur before evacuation of the building is complete. Suitable measures include:

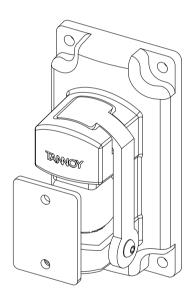
- Use of terminal blocks (for connection to primary) with a melting point of not less than 650°C, for example constructed from ceramic materials;
- Use of terminal blocks of a lower melting point but protected with thermal insulation;
- Use of terminal blocks such that, on melting, an open-circuit or a short-circuit does not occur.

3. Unpacking

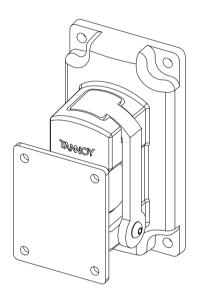
Every Tannoy product is carefully inspected before shipment. After unpacking, please inspect your product to ensure no damage has occurred in transit. In the unlikely event of damage, please notify your dealer and retain all shipping materials as your dealer may require return shipment.

4. Accessories

Optional multi-angle accessory bracket







AMS 6 & 8 Multi-Angle Bracket

The optional multi-angle accessory bracket utilizes a ball-in-socket design to enable free orientation of the loudspeaker at any angle on either the horizontal or vertical axis. If desired, the loudspeaker orientation can be easily changed within minutes. For installation instructions, see section 5.2.

5. Installation

5.1. Installation using included yoke bracket

- 1. Fix the yoke bracket to an appropriate structural surface using a suitable fixing method.
- 2. Remove the yoke trims from the product to access the bracket fixing points.



- 3. Set the transformer tap as detailed in Section 6 following.
- 4. **For indoor installation** (proceed to step 5 for outdoor installation): Connect the euro-style plug to the wires, observing correct polarity. Use pins 1(+) and 2 (-) for connection of the loudspeaker. Use pins 3 (-) and 4 (+) for connection of additional loudspeakers in a distributed line. NOTE: Tighten pins 3 and 4 even if not used to prevent vibration of the screws.
- 5. **For outdoor installation:** Feed the loudspeaker wire(s) through the opening in the neck of the cable entry cover included with the product.

Connect the euro-style plug to the wires, observing correct polarity. Use pins 1(+) and 2 (-) for connection of the loudspeaker. Use pins 3 (-) and 4 (+) for connection of additional loudspeakers in a distributed line. NOTE: Tighten pins 3 and 4 even if not used to prevent vibration of the screws.



6. Place the loudspeaker inside the yoke bracket. Position buffers between bracket and loudspeaker as shown. Attach with supplied fixings using a 5mm Allen key. Use the longer hex screws supplied when mounting the yoke bracket.



- 7. Connect the euro plug to the loudspeaker. For outdoor installation, attach the cable entry cover using a 3 mm Allen key and the included screws. Orient the cover plate so that the neck opening is facing downward to minimise entry of moisture or particulates.
- 8. Connect a secondary support line to the safety tab at the rear of the cabinet.

5.2. Installation using optional VariBall bracket

Please see AMS VariBall Accessory Backet - Mounting and Installation Guide for reference.

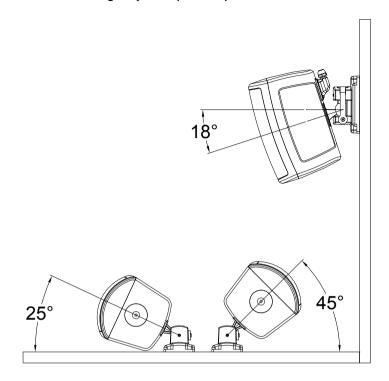
- 1. Fix the wall bracket to the wall surface using suitable fixing method for supporting the loudspeaker with ample safety margins.
- 2. Fix the ball bracket to the rear of the loudspeaker using the supplied screws and a 3 mm Allen key. Two screws are used for AMS 5 models; four screws are used for AMS 6 and AMS 8 models.
- 3. Set the transformer tap as detailed in Section 6 following.
- 4. **For indoor installation** (proceed to step 5 for outdoor installation): Connect the euro-style plug to the wires, observing correct polarity. Use pins 1(+) and 2 (-) for connection of the loudspeaker. Use pins 3 (-) and 4 (+) for connection of additional loudspeakers in a distributed line. Note: Tighten pins 3 and 4 even if not used to prevent vibration of the screws.
- 5. **For outdoor installation:** Feed the loudspeaker wire(s) through the opening in the neck of the cable entry cover included with the product.

Connect the euro-style plug to the wires, observing correct polarity. Use pins 1(+) and 2 (-) for connection of the loudspeaker. Use pins 3 (-) and 4 (+) for connection of additional loudspeakers in a distributed line. NOTE: Tighten pins 3 and 4 even if not used to prevent vibration of the screws.

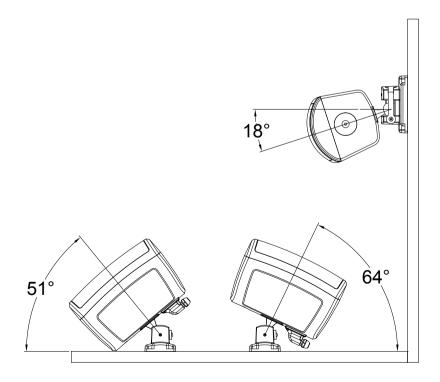


- 6. Raise the lever to open the wall bracket. Insert the ball bracket into the wall bracket, position as required, and then lower the lever to lock the ball bracket into place. Raise the lever if any readjustment is necessary. Once in final position, tighten the grub screw at the bottom of the wall bracket to secure in place.
- 7. Connect the euro plug to the loudspeaker. For outdoor installation, attach the cable entry cover using a 3 mm Allen key and included screws. Orient the cover plate so that the neck opening is facing downward to minimise entry of moisture or particulates.
- 8. Connect a secondary support line to the safety tab at the rear of the cabinet.

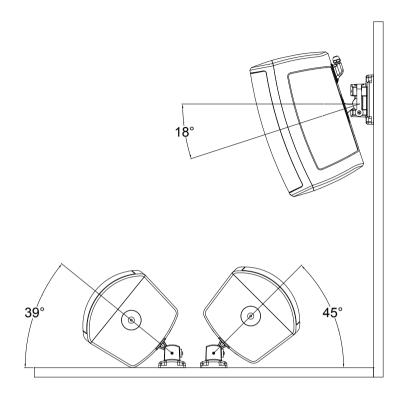
AMS 5 - Variball Angle Options (Vertical)



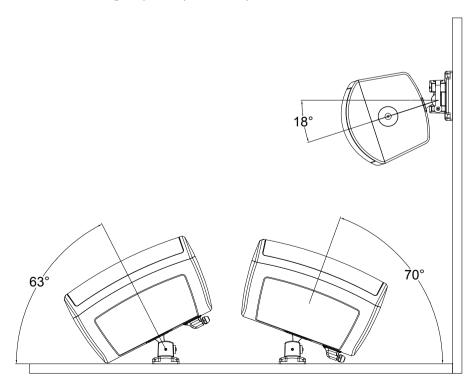
AMS 5 - Variball Angle Options (Horizontal)



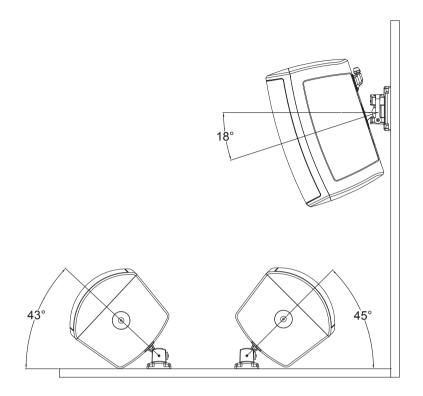
AMS 6 - Variball Angle Options (Vertical)



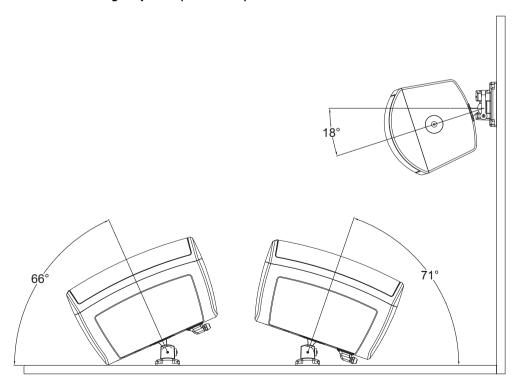
AMS 6 - Variball Angle Options (Horizontal)



AMS 8 - Variball Angle Options (Vertical)



AMS 8 - Variball Angle Options (Horizontal)



6. Setting transformer taps

1. The rotary transformer tapping switch is located directly above the wiring connector.

CAUTION: The loudspeaker is supplied with the tap switch set in low impedance mode. Never connect the loudspeaker to a 70/100 V amplifier output while switched to low impedance mode.

2. Set the rotary switch to the appropriate position for low impedance operation or for use in 70/100 V distributed systems.

Models with 5-inch drivers are fitted with 30 W transformers. In distributed line applications, the transformer can be tapped at 30 W, 15 W and 7.5 W, with an additional 3.75 W tap for 70 V line systems.

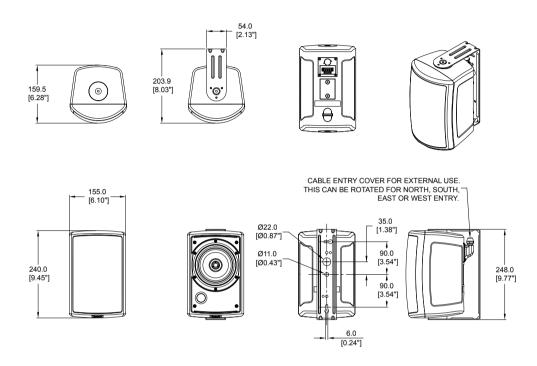


Models with 6-inch and 8-inch drivers are fitted with 60W transformers. In distributed line applications, the transformer can be tapped at 60 W, 30 W and 15 W, with an additional 7.5 W tap for 70 V line systems.

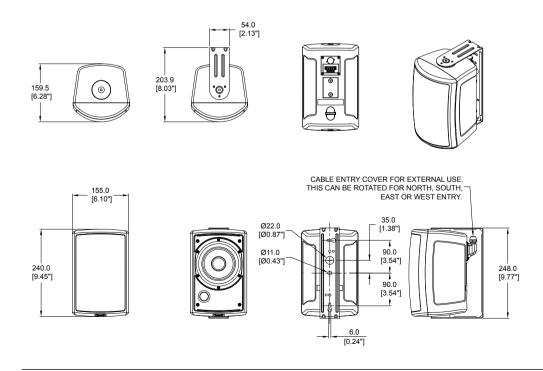


7. Product Dimensions

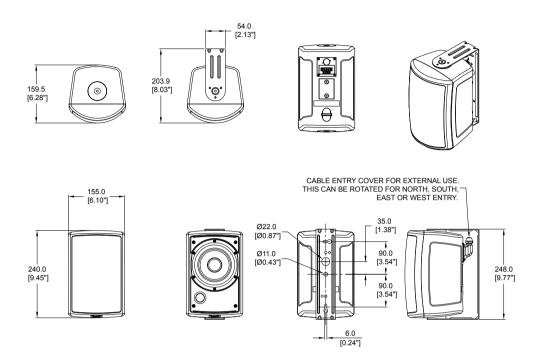
AMS 5DC



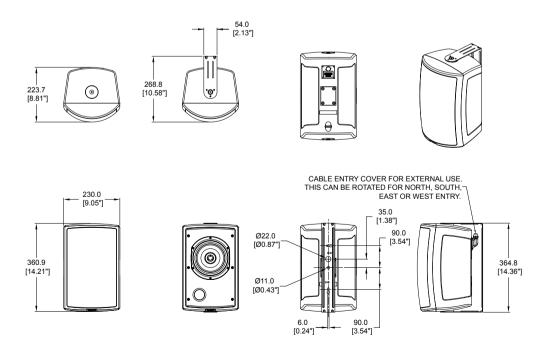
AMS 5ICT



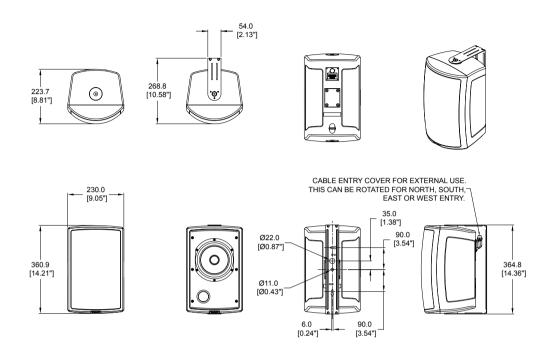
AMS 5ICT LS



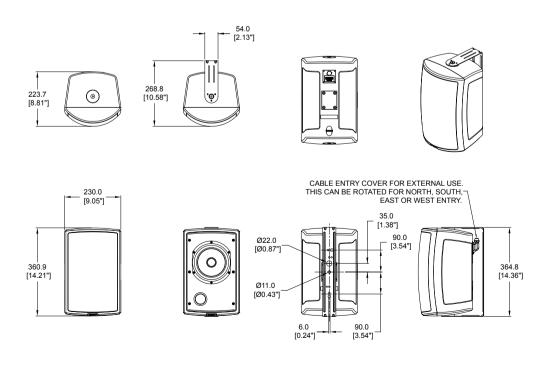
AMS 6DC



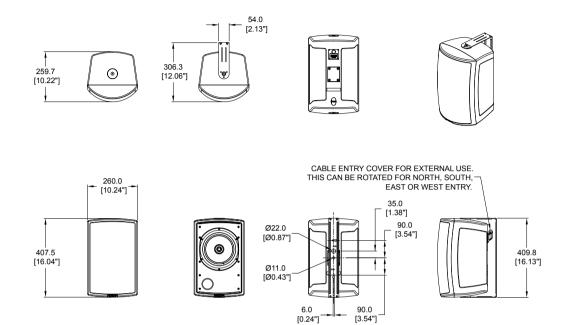
AMS 6ICT



AMS GICT LS



AMS 8DC



8. Technical Specifications

AMS 5DC Model

Performance 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 240 W **Recommended Amplifier Power** 120 W @ 16 ohms Nominal Impedance (Lo, Z) 16 ohms Rated maximum SPL Average 105 dB Peak Transformer Taps (via front rotary switch) 70 V 30 W / 15 W / 7.5 W / 3.75 W / OFF & Low impedance operation 100 V 30 W / 15 W / 7.5 W / OFF & Low impedance operation

Transducers

Dual Concentric™ point source driver

Low Frequency

High Frequency

1x 130 mm (5.0") Dual Concentric™ driver, using Omnimagnet technology
35 mm (1.38") voice coil, treated multi fibre paper pulp cone
20 mm (0.79") PEI dome

Physical Enclosure Steel, plated and painted Removable locking connector with screw terminals Connectors 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) 3.66 kg (8.07 lbs) Shipped weight **Included Accessories** Yoke bracket **Packed Quantity**

Ordering Information
Part Number
8001 7945
8001 7946

Colour Black White





Notes

- Average over stated bandwidth. Measured in an IEC baffle in an Anechoic Chamber
- Unweighted pink noise input, measured at
 metre on axis
- 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.tannovpro.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 anolitications.

AMS 5ICT Model

 Ferformance
 AMS 5ICT

 System
 AMS 5ICT

 Frequency response (-3 dB) (1)
 90 Hz - 22 kHz

 Frequency range (-10 dB) (1)
 80 Hz - 30 kHz

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

Nominal Coverage Angle 90 degrees conical

Power Handling (3)

 Average
 50 W

 Programme
 100 W

 Peak
 200 W

Recommended Amplifier Power 100 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 / 3.75 W / OFF & Low impedance operation

100 V 30 W / 15W / 7.5W / OFF & Low impedance operation

 Transducers

 Low Frequency
 1x 130 mm (5.00") treated multi fibre paper pulp cone

 High Frequency
 ICTTM

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

8001 7955 8001 7956 Colour Black White





Notes

- Average over stated bandwidth. Measured in an IEC baffle in an Anechoic Chamber
- Unweighted pink noise input, measured at
 metre on axis
- Long term power handling capacity as defined
 in FIA 400R test

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

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AMS 5ICT LS Model

 Performance
 AMS 5ICT LS

 System
 AMS 5ICT LS

 Frequency response (-3 dB) (1)
 90 Hz - 22 kHz

 Frequency range (-10 dB) (1)
 80 Hz - 30 kHz

System sensitivity (1 W @ 1m) (2) 88 dB (1W = 4V for 16 ohms)

Nominal Coverage Angle 90 degrees conical

Power Handling (3)

 Average
 50 W

 Programme
 100 W

 Peak
 200 W

Recommended Amplifier Power 100 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 / 3.75 W / OFF & Low impedance operation

100 V 30 W / 15 W / 7.5 W / OFF & Low impedance operation

Transducers

Low Frequency 1 x 130 mm (5.00") treated multi fibre paper pulp cone

High Frequency ICT

Physical 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 7965 Black
8001 7966 White





Notes

- Average over stated bandwidth. Measured in an IEC baffle in an Anechoic Chamber
- Unweighted pink noise input, measured at
 metre on axis
- Long term power handling capacity as defined
 in EIA 436B toot

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

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AMS 6DC Model

 Performance
 AMS 6DC

 System
 AMS 6DC

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

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

System sensitivity (1 W @ 1m) (2) 89 dB (1 W = 4 V for 16 ohms)

Nominal Coverage Angle 90 degrees conical

Power Handling (3)

 Average
 80 W

 Programme
 160 W

 Peak
 320 W

Recommended Amplifier Power 160 W @ 16 ohms

Nominal Impedance (Lo, Z) 16 ohms

Rated maximum SPL

Average 108 dB Peak 114 dB

Transformer Taps (via front rotary switch)

70 V 60 W / 30 W / 15 W / 7.5 W / OFF & Low impedance operation

100 V 60 W / 30 W / 15 W / OFF & Low impedance operation

Transducers

 Dual Concentric™ point source driver
 1x 165 mm (6.50") Dual Concentric™ driver, using Omnimagnet technology

 Low Frequency
 44 mm (1.75") voice coil, treated multi fibre paper pulp cone

High Frequency 25 mm (1.00") 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) 364.8 x 230.0 x 268.8 mm, (14.36 x 9.05 x 10.58")

 Net Weight (ea)
 6.08 kg (13.40 lbs)

 Shipped weight
 6.76 kg (14.90 lbs)

 Included Accessories
 Yoke bracket

Packed Quantity 2

Ordering Information Part Number

8001 7970 8001 7971 Colour Black White





Notes

- Average over stated bandwidth. Measured in an IEC baffle in an Anechoic Chamber
- Unweighted pink noise input, measured at
 metre on axis
- Long term power handling capacity as defined
 in FIA 400R test

A full range of measurements, performance data, CLF and Ease™ Data for AMS 6DC can be downloaded from www.tannoypro.com.

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AMS 6ICT Model

Performance AMS 6ICT System Frequency response (-3 dB) (1) 75 Hz - 22 kHz Frequency range (-10 dB) (1) 55 Hz - 30 kHz

System sensitivity (1 W @ 1m) (2) 90 dB (1 W = 4 V for 16 ohms)

Nominal Coverage Angle 90 degrees conical

Power Handling (3)

60 W Average Programme 120 W 240 W Peak

Recommended Amplifier Power 120 W @ 16 ohms

Nominal Impedance (Lo, Z) 16 ohms

Rated maximum SPL

Average 108 dB Peak 114 dB

Transformer Taps (via front rotary switch)

70 V 60 W / 30 W / 15 W / 7.5 W / OFF & Low impedance operation 60 W / 30 W / 15 W / OFF & Low impedance operation

Transducers Low Frequency

1 x 165 mm (6.50") treated multi fibre paper pulp cone

High Frequency

Physical ABS Enclosure

Grille Steel, plated and painted

Connectors Removable locking connector with screw terminals

Transformer setting Rotary switch

Dimensions (H x W x D) 364.8 x 230.0 x 268.8 mm (14.36 x 9.05 x 10.58") Net Weight (ea) 5.14 kg (11.33 lbs) Shipped weight 5.82 kg (12.83 lbs) Included Accessories Yoke bracket

Packed Quantity

Ordering Information **Part Number**

8001 7980 8001 7981 Colour Black White





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

A full range of measurements, performance data. CLE and Ease™ Data for AMS 6ICT 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 Tannov reserves the right to alter without prior notice. Please verify the latest specifications when dealing with critical applications.

AMS 6ICT LS Model

Performance AMS 6ICT LS System Frequency response (-3 dB) (1) 75 Hz - 30 kHz Frequency range (-10 dB) (1) 55 Hz - 30 kHz System sensitivity (1 W @ 1m) (2) 90 dB (1W = 4V for 16 ohms) Nominal Coverage Angle 90 degrees conical

Power Handling (3) 60 W Average

Programme 120 W 240 W Peak

Recommended Amplifier Power 120 W @ 16 ohms

Nominal Impedance (Lo, Z) 16 ohms Rated maximum SPL

Average

108 dB Peak 114 dB

Transformer Taps (via front rotary switch)

70 V 60 W / 30 W / 15 W / 7.5 W / OFF & Low impedance operation 60 W / 30 W / 15 W / OFF & Low impedance operation

Transducers Low Frequency 1 x 165 mm (6.50") treated multi fibre paper pulp cone **High Frequency** ICT

Physical Enclosure ABS

Grille

Connectors Removable locking connector with screw terminals

Transformer setting Rotary switch 364.8 x 230.0 x 268.8 mm Dimensions (H x W x D)

(14.36 x 9.05 x 10.58") Net Weight (ea) 5.14 kg (11.33 lbs) Shipped weight 5.82 kg (12.83 lbs) Included Accessories Yoke bracket

Packed Quantity

Ordering Information **Part Number** Colour 8001 8340 Black 8001 8341 White





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

A full range of measurements, performance data, CLE and Ease™ Data for AMS 6ICT LS can be downloaded from www.tannoypro.com

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AMS 8DC Model

 Performance
 AMS 8DC

 System
 AMS 8DC

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

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

System sensitivity (1 W @ 1m) (2) 92 dB (1 W = 4 V for 16 ohms)

Nominal Coverage Angle 90 degrees conical

Power Handling (3)

 Average
 90 W

 Programme
 180 W

 Peak
 360 W

Recommended Amplifier Power 180 W @ 16 ohms

Nominal Impedance (Lo, Z) 16 ohms

Rated maximum SPL

Average 111 dB Peak 117 dB

Transformer Taps (via front rotary switch)

70 V 60 W / 30 W / 15 W / 7.5 W / OFF & Low impedance operation

100 V 60 W / 30 W / 15 W / OFF & Low impedance operation

Transducers

Dual Concentric™ point source driver 1x 200 mm (8.00") Dual Concentric™ driver, using Omnimagnet technology

Low Frequency 44 mm (1.75") voice coil, treated multi fibre paper pulp cone

High Frequency 25 mm (1.00") 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) 409.8 x 260.0 x 306.3 mm (16.13 x 10.24 x 12.06")

 Net Weight (ea)
 7.82 kg (17.24 lbs)

 Shipped weight
 8.69 kg (19.16 lbs)

 Included Accessories
 Yoke bracket

Packed Quantity 2

Ordering Information
Part Number

8001 7990 8001 7791 Colour Black White





Notes

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

A full range of measurements, performance data, CLF and Ease™ Data for AMS 8DC can be downloaded from www.tannoypro.com.

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9. Warranty

No maintenance of the AMS Series loudspeaker is necessary.

All Tannoy products have been produced and tested with care to assure reliable service.

All passive components are guaranteed for a period of five years from the date of purchase from an authorised Tannoy dealer, subject to the absence or evidence of misuse, overload, or accidental damage.

All active and electronic components are guaranteed for a period of one year from the date of purchase from an authorised Tannoy dealer subject to the absence of, or evidence of, misuse, overload or accidental damage.

If at any time during this warranty period the equipment proves to be defective for any reason other than accident, misuse, neglect, unauthorised modification or fair wear and tear, we will repair any such manufacturing defect or, at our option, replace it without charge for labour, parts or return carriage. If you suspect a problem with a Tannoy product then, in the first instance, discuss it with your Tannoy dealer. If you require further assistance then we ask that you deal directly with your local Tannoy distributor. If you cannot locate your distributor please contact Customer Services, Tannoy Ltd at the address given below.

Customer Services
Tannoy Ltd.
Rosehall Industrial Estate
Coatbridge
Strathclyde
ML5 4TF
Scotland

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+44 1236 420199 (International)

Fax: 01236 428230 (National)

+44 1236 428230 (International)

Support: http://support.tannoy.com

DO NOT SHIP ANY PRODUCT TO TANNOY WITHOUT PREVIOUS AUTHORISATION

Our policy commits us to incorporating improvements to our products through continuous research and development. Please confirm current specifications for critical applications with your supplier.

Notes

Notes

Notes

tannoypro.com