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**AES standard for acoustics -
Methods of measuring and specifying
the performance of loudspeakers for
professional applications -
Drive units**

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AES standard for acoustics - Methods of measuring and specifying the performance of loudspeakers for professional applications - Drive units

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Abstract

This document is a recommended practice for describing and specifying loudspeaker components used in professional audio and sound-reinforcement systems. These components include high-frequency drivers and low-frequency drivers. Specifications are given for describing frequency response, impedance, distortion, and power handling.

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This foreword is not part of the AES2-2012 *AES standard for acoustics - Methods of measuring and specifying the performance of loudspeakers for professional applications - Drive units*

Foreword to 1984 edition

The purpose of this document is to recommend methods of specifying the performance of loudspeaker components used in music, speech, and fixed-signal (such as siren alert) systems. It is needed so that these components may be compared on an equal basis, by methods which directly relate to their specific real use. Previously, no such practice or standard existed for this class of acoustical product. Tests and nomenclature used in this document are compatible with IEC Standard, Publication 268-5 (1972) and Supplement 268-5A (1980).

The document presented here is a complete recommendation.

This committee was suggested and formed by John Eargle in 1975 November, and the following members have contributed to the processing and approval of this Recommended Practice:

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Foreword to 2012 edition

This document substantially revises and updates AES2-1984.

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Note on normative language

In AES standards documents, sentences containing the word “shall” are requirements for compliance with the document. Sentences containing the verb “should” are strong suggestions (recommendations). Sentences giving permission use the verb “may”. Sentences expressing a possibility use the verb “can”.

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1 Scope

This document defines a minimum set of characteristics of loudspeaker drivers for inclusion in manufacturers' specification documents, and identifies the relevant methods of measurement.

The document considers drivers and passive loudspeaker systems for professional applications. It does not consider sub-components such as spiders or cones. It is intended for loudspeaker system designers, and drive-unit manufacturers.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60268-1: *Sound system equipment, Part 1: General.* International Electrotechnical Commission, Geneva, Switzerland.

IEC 60268-2: *Sound system equipment, Part 2: Explanation of general terms & calculation methods.* International Electrotechnical Commission, Geneva, Switzerland.

IEC 60268-5 Ed.3.1 2007: *Sound system equipment, Part 5: Loudspeakers.* International Electrotechnical Commission, Geneva, Switzerland.

IEC 61260: *Electroacoustics - octave-band and fractional-octave-band filters.* International Electrotechnical Commission, Geneva, Switzerland.

ISO 3741: *Acoustics - Determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms.* International Organization for Standardization, Geneva, Switzerland.