

STANDARDS AND INFORMATION DOCUMENTS

AES3-3-2009
(reaffirmed 2019)



**AES standard for digital audio —
Digital input-output interfacing —
Serial transmission format for two-channel
linearly represented digital audio data,
Part 3: Transport**

(Multi-part revision of AES3-2003, incorporating Amendments 5 & 6)

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**AES standard for digital audio —
Digital input-output interfacing —
Serial transmission format for two-channel
linearly-represented digital audio data —
Part 3: Transport**

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Abstract

AES3 provides for the serial digital transmission of two channels of periodically sampled and uniformly quantized audio signals on various media.

This Part specifies the framing and channel coding for transmission on a unidirectional point-to-point physical link. The specified format minimizes the direct-current (DC) component on the transmission line, facilitates clock recovery from the data stream, and makes the interface insensitive to the polarity of connections.

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Foreword

This foreword is not part of the *AES3-3-2009, AES standard for digital audio — Digital input-output interfacing — Serial transmission format for two-channel linearly represented digital audio data, Part 3: Transport*.

AES3 has been under constant review since the standard was first issued in 1985, and the present edition reflects the collective experience and opinions of many users, manufacturers, and organizations familiar with equipment or systems employing AES3.

This document was adapted by R. Caine from the 2003 edition as amended by Amendments 5 and 6, and its technical content is believed to be identical to the relevant parts of that version. Other members of the writing group that developed this document in draft included: C. Travis, C. Langen, H. Jahne, J. Grant, J. Woodgate, M. Natter, M. Pimboeuf, R. Cabot, S. Heinzmann, M. Werwein, and M. Yonge.

J Grant, chair
SC-02-02 Working Group on Digital Input-Output Interfacing
May 2009

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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”.

AES standard for digital audio — Digital input-output interfacing — Serial transmission format for two-channel linearly-represented digital audio data — Part 3: Transport

1 Scope

These four documents specify an interface for the serial digital transmission of two channels of periodically sampled and linearly represented digital audio data from one transmitter to one receiver. This Part 3 defines the format for transport of an AES3 digital audio interface.

Specific synchronization issues are covered in AES11 *AES recommended practice for digital audio engineering -- Synchronization of digital audio equipment in studio operations*. An engineering guideline document to accompany this interface specification has been published as AES-2id *AES information document for digital audio engineering - Guidelines for the use of the AES3 interface*.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this document. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this document are encouraged to investigate the possibility of applying the most recent editions of the indicated standards.

None.