

STANDARDS AND INFORMATION DOCUMENTS

**AES43-2000
r2010; s2012**



AES standard for forensic audio - Criteria for the authentication of analog audio tape recordings

Users of this standard are encouraged to determine if they are using the latest printing incorporating all current amendments and editorial corrections. Information on the latest status, edition, and printing of a standard can be found at:
<http://www.aes.org/standards>

AUDIO ENGINEERING SOCIETY, INC.
551 Fifth Avenue, New York, NY 10176, US.



The AES Standards Committee is the organization responsible for the standards program of the Audio Engineering Society. It publishes technical standards, information documents and technical reports. Working groups and task groups with a fully international membership are engaged in writing standards covering fields that include topics of specific relevance to professional audio. Membership of any AES standards working group is open to all individuals who are materially and directly affected by the documents that may be issued under the scope of that working group.

Complete information, including working group scopes and project status is available at <http://www.aes.org/standards>. Enquiries may be addressed to standards@aes.org

The AES Standards Committee is supported in part by those listed below who, as Standards Sustainers, make significant financial contribution to its operation.



audio-technica



CLAIR



WEISS



METRIC HALO



This list is current as of 2018/9/01

**AES standard for forensic purposes –
Criteria for the authentication of analog audio tape
recordings**

Published by

Audio Engineering Society, Inc.

Copyright © 2000 by the Audio Engineering Society

Abstract

The purpose of this standard is to formulate a standard scientific procedure for the authentication of audio tape recordings intended to be offered as evidence or otherwise utilized in civil, criminal, or other fact finding proceedings.

An AES standard implies a consensus of those directly and materially affected by its scope and provisions and is intended as a guide to aid the manufacturer, the consumer, and the general public. The existence of an AES standard does not in any respect preclude anyone, whether or not he or she has approved the document, from manufacturing, marketing, purchasing, or using products, processes, or procedures not in agreement with the standard. Prior to approval, all parties were provided opportunities to comment or object to any provision. Approval does not assume any liability to any patent owner, nor does it assume any obligation whatever to parties adopting the standards document. This document is subject to periodic review and users are cautioned to obtain the latest edition.



Contents

Foreword 3

1 Scope 4

2 Normative references..... 4

3 Definitions 4

4 Verification of authenticity 5

 4.1 Criteria..... 5

 4.2 Equipment 5

 4.3 Reporting..... 5

5 Examination and analysis..... 5

 5.1 Evidence management 5

 5.2 Critical listening and waveform examination..... 6

 5.3 Photo-microscopic analysis 8

 5.4 The formulation of an opinion and conclusion..... 8

6 Testimony..... 9

 6.1 Preparation 9

 6.2 Problems..... 9

Annex A: Informative references 11



Foreword

[This foreword is not a part of this *standard for forensic purposes — criteria for the authentication of analog audio tape recordings*, AES43-2000.]

This document was developed by a writing group, headed by A. Pellicano, of the SC-03-12 Working Group on Forensic Audio of the SC-03 Subcommittee on the Preservation and Restoration of Audio Recordings. The writing group was formed to execute project AES-X48.

It results from an international consensus and is not intended to reflect the practice of any single nation. As an AES standard, it is an international professional society's statement of technical good practice, but its use is entirely voluntary and it does not have the status of a governmental regulation. Nevertheless, any claim to voluntary compliance with the standard implies acceptance of its mandatory clauses.

In 1991, SC-03-12 was organized as AESSC WG-12 at the request of a community of engineers from the AES, the Acoustical Society of America, various law enforcement agencies, and groups concerned with testimony. The group concerns itself with the handling, authentication, and enhancement of audio recorded materials basing itself on methodologies such as developed from those described in Bolt, Cooper, Flanagan, McKnight, Stockham, and Weiss, *Report on a Technical Investigation Conducted for the U.S. District Court for the District of Columbia by the Advisory Panel on the White House Tapes. May 31, 1974.*

This document results from one of the projects set out at the early meetings of the working group.

Tom Owen, Chair of SC-03-12
Michael McDermott, Vice-Chair of SC-03-12

1999-09-03



AES standard for forensic purposes — Criteria for the authentication of analog audio tape recordings

1 Scope

This standard specifies the minimum procedure for the authentication of analog audio tape recordings intended to be offered as evidence or otherwise utilized in civil, criminal, or other fact finding proceedings. It does not specify or restrict additional testing procedures that can be used.

These methodologies are suggested to any and all individuals and groups who hold themselves out to be or are recognized as forensic tape analysts or experts.

This standard is a set of procedures set forth to inform attorneys, courts, and other interested parties. It also serves to aid interested parties who are attempting to determine whether or not the procedures and methodologies of potential, chosen, or opposing experts are of a scientific nature and would withstand objective scrutiny.

2 Normative references

The following standard contains provisions that, through reference in this text, constitute provisions of this document. At the time of publication, the edition indicated was 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.

AES27-1996, AES recommended practice for forensic purposes — Managing recorded audio materials intended for examination.

3 Definitions

3.1

authentication

authentic recording and authenticity analysis as defined in AES27

3.2

forensic tape analyst

FTA

entity performing authentication according to this standard

3.3

designated original recording

DOR

original recording as defined in AES27

3.4

designated originating recording device

DORD

original recorder as defined in AES27

