AES project report for professional audio — Specifications for audio on high-capacity media

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Abstract

This document is the report of Task group SC-02-M, a task force within the Audio Engineering Society Standards Committee (AESSC), which studied the future of high-capacity audio media for over one year with input from more than 80 persons and organizations.

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Foreword

[This foreword is not a part of AES project report for professional audio — Specifications for audio on high-capacity media, AES-R1-1997.]

Task group SC-02-M, a task force within the Audio Engineering Society Standards Committee (AESSC), studied the future of high-capacity audio media for over one year with input from more than 80 persons and organizations. The fundamental ingredients of the future of audio are the potential increase to the number of audio channels and improvements to audio coding methods including sample rate and word length. Any practical system will involve tradeoffs among these factors, and the task force discussed each of the ingredients in turn at length, to form the basis of recommendations for future work. In order to forward the goals of improved audio, the task force recommends that scientific listening tests be conducted of proposed new systems, so that in conjunction with the other technical factors that form any new system, a rational basis for the development of the industry can occur.

The Audio Engineering Society is unique in being international in scope, and in crossing boundaries between professional and consumer applications of audio. This places it in a position of responsibility to manage the hierarchical development of production, distribution, and reproduction oriented parts of the industry.

This document was prepared by the SC-02-M task group of the AESSC SC-02 Subcommittee am digital Audio. The task group was chaired by J. Eargle and T. Holman

This document is a report and not a standard of information document. It does not follow IEC and AES editorial style and has not proceeded beyond subcommittee approval in the AESSC consensus process.

J. Nunn, Chairman R, Finger, Vice-Chairman 1997-11-04

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Introduction

At the Fall 1995 meeting of the AESSC SC-02 Subcommittee on Digital Audio, held in New York, a task group, SC-02-M, Task Force on High-Capacity Digital Audio was formed. John Eargle and Tomlinson Holman were appointed cochairs. The goals of the task force as described in AESSC project AES-X38, were to:

- 1. describe options for advanced audio systems, including utilization of high-capacity media and corresponding interconnection systems;
- 2. involve in its deliberations all interested members of the community, including artists, recording engineers, producers, record companies, development engineers, and manufacturers;
- 3. move towards goals 1 and 2 with all deliberate speed in order to have a significant influence on current developments.

This is a report of the task force including recommendations for further work. The first section of this report is a discussion of the various topics encountered and a summary of discussions had about the topics. The second section is the task force's document number D25, "Professional Technology and Release Media utilization of sample rate, word length, audio coding, and number of audio channels, with DVD-Audio as an example." The third section is the Task Force report to the SC-02 Subcommittee on Digital Audio, which details the operations of the task force.