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ISO/IEC JTC1/SC 29/WG 6

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**Information technology — Coding of audio-visual objects — Part 35: Audio reference software**

CD stage

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This second/third/… edition cancels and replaces the first/second/… edition (ISO #####:####), which has been technically revised.

The main changes are as follows:

— xxx xxxxxxx xxx xxxx

A list of all parts in the ISO ##### series can be found on the ISO website.

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**CONTENTS**

|  |
| --- |
| *Page* |
| Foreword iii  1 Scope 2  2 Copyright disclaimer for software modules 2  3 Audio reference software 3 |

Information technology — Coding of audio-visual objects —

Part 35:  
Audio reference software

# Scope

Reference software is normative in the sense that any conforming implementation of the software, taking the same conformant bitstreams, using the same output file format, will output the same file. Complying ISO/IEC 14496-3 implementations are not expected to follow the algorithms or the programming techniques used by the reference software. Although the decoding software is considered normative, it cannot add anything to the textual technical description included in part 3 of ISO/IEC 14496.

This part of ISO/IEC 14496 includes elementary stream decoding software that accepts elementary streams encoded according to the normative specification in part 3 of ISO/IEC 14496 and decodes the streams into the audio associated with each elementary stream. Attention is drawn to the fact that the implementation techniques used in this software are not considered normative – several different implementations could produce the same result – but the software is considered normative in that it correctly implements the decoding processes described in part 3 of ISO/IEC 14496.

Further included in this part of ISO/IEC 14496 is elementary stream encoding software that creates elementary streams from audio input. The encoders are provided as a means to obtain elementary streams with the normative syntax described in part 3 of ISO/IEC 14496. The techniques used for encoding are not specified by this specification, and the quality and complexity of these encoders has not been optimized.

Further included in this part of ISO/IEC 14496 is utility software that was found useful by the developers of the standard but may not conform to the normative specifications given in part 3 of ISO/IEC 14496.

File locations given in this part of ISO/IEC 14496 are expressed relative to its location in the source tree. Reference software is provided at https://standards.iso.org/iso-iec/14496/-35/ed-1/en/

# Audio reference software

|  |  |
| --- | --- |
| **Location** | **Content** |
| natural/mp4AudVm\_Rewrite | Natural audio software |
| natural/mp4mcEnc/Dec | Software for multichannel t/f streams |
| natural/epTool | Error protection decoder extension |
| natural/aacErrRobTrans | Transcoder for error robust AAC |
| SNHC/mpeg4sa | Structured audio software |
| SNHC/mpeg4ac | Audio composition software |
| SNHC/mpeg4ttsi | Text to speech software |
| lossless | Lossless audio software |
| natural/conf\_\* | Tools for audio conformance |
| natural/errGen | Error generator |