

INTERNATIONAL STANDARD

Digital audio – Interface for non-linear pcm encoded audio bitstreams applying
IEC 60958 –
Part 13: MPEG-H 3D Audio



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IEC 60958 –
Part 13: MPEG-H 3D Audio**

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CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references	6
3 Terms, definitions and abbreviated terms	6
3.1 Terms and definitions.....	6
3.2 Abbreviated terms.....	8
4 Mapping of the audio bit stream on to IEC 61937-1	8
4.1 General.....	8
4.2 Burst-info for MPEG-H 3D Audio.....	8
5 Format of data-burst for MPEG-H 3D Audio	9
5.1 General.....	9
5.2 Pause data-bursts for MPEG-H 3D Audio.....	9
5.3 Audio data-bursts.....	9
5.3.1 MPEG-H 3D Audio.....	9
5.3.2 MPEG-H 3D Audio HBR.....	11
5.3.3 Burst payload use cases.....	14
5.3.4 Latency.....	16
Figure 1 – MPEG-H 3D Audio data-burst structure	9
Figure 2 – MPEG-H 3D Audio HBR data-burst structure.....	11
Figure 3 – MPEG-H 3D Audio burst payload	14
Figure 4 – MPEG-H 3D Audio burst payload for overlapping data frame.....	15
Figure 5 – MPEG-H 3D Audio burst payload for truncated data frame	16
Table 1 – Values of data-type for MPEG-H 3D Audio	8
Table 2 – Repetition period of pause data-bursts for MPEG-H 3D Audio	9
Table 3 – MPEG-H 3D Audio burst payload header structure entry	10
Table 4 – Data-type-dependent information for data-type MPEG-H 3D Audio	10
Table 5 – Repetition period and maximum data-burst payload size for data type MPEG-H 3D Audio.....	11
Table 6 – MPEG-H 3D Audio HBR burst payload header structure entry	12
Table 7 – Data-type-dependent information for data-type MPEG-H 3D Audio HBR.....	12
Table 8 – Repetition period and maximum data-burst payload size for value 0 of Pc bits 11 and 12 (2 × audio sample rate).....	13
Table 9 – Repetition period and maximum data-burst payload size for value 1 of Pc bits 11 and 12 (4 × audio sample rate).....	13
Table 10 – Repetition period and maximum data-burst payload size for value 2 of Pc bits 11 and 12 (8 × audio sample rate).....	13
Table 11 – Repetition period and maximum data-burst payload size for value 3 of Pc bits 11 and 12 (16 × audio sample rate).....	14
Table 12 – MPEG-H 3D Audio burst payload header structure entries.....	15
Table 13 – MPEG-H 3D Audio burst payload header structure entries for overlapping data frame	15
Table 14 – MPEG-H 3D Audio burst payload header structure entries for truncated data frame.....	16

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DIGITAL AUDIO –
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CDV	Report on voting
100/2943/CDV	100/3068/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61937 series, published under the general title *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
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A bilingual version of this publication may be issued at a later date.

INTRODUCTION

Modern digital video standards, such as ATSC and DVB, are preparing for next-generation TV broadcast systems. The latest evolutions in audio introduce fundamental changes to the way audio is produced, and may well revolutionize the user experience. The new MPEG-H audio standard offers not only immersive 3D Audio, but it also introduces the concept of audio objects that can be used to personalize the user experience.

The MPEG-H 3D Audio standard is the next generation MPEG audio codec, and it requires a framing format that supports more flexible signalling and delivery mechanisms than were needed for earlier systems. Therefore, the MPEG-H 3D Audio Transport Stream (MHAS) framing format was specified for use with the MPEG-H 3D Audio codec.

In order to be able to pass the MPEG-H 3D Audio bit stream from a set-top box to an A/V receiver connected via the IEC 60958 interface, this part of IEC 61937 employs the MHAS framing format.

DIGITAL AUDIO – INTERFACE FOR NON-LINEAR PCM ENCODED AUDIO BITSTREAMS APPLYING IEC 60958 –

Part 13: MPEG-H 3D Audio

1 Scope

This part of IEC 61937 specifies the method to convey non-linear PCM bitstreams encoded according to the MPEG-H 3D Audio format.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60958 (all parts), *Digital audio interface*

IEC 61937-1, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 1: General*

IEC 61937-2, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 2: Burst-info*

ISO/IEC 23008-3:2015, *Information technology – High efficiency coding and media delivery in heterogeneous environments – Part 3: 3D audio*

3 Terms, definitions and abbreviated terms

For the purposes of this document, the terms and definitions given in IEC 61937-1, IEC 61937-2 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 Terms and definitions

3.1.1

audio sample rate

sampling frequency of the linear PCM audio samples before encoding and after decoding

3.1.2

frame length

number of linear PCM audio samples per MPEG-H 3D Audio data frame

Note 1 to entry: MPEG-H 3D Audio can operate in several modes using any of 1 024, 2 048, 4 096, 768, 1 536 or 3 072 linear PCM audio samples per MPEG-H 3D Audio data frame.