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

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 2: Burst-info

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 61937-2:2007+AMD1:2011+AMD2:2018 CSV. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

IEC 61937-2 has been prepared by technical area 20: Analogue and digital audio, of IEC technical committee 100: Audio, video and multimedia systems and equipment. It is an International Standard.

This third edition cancels and replaces the second edition published in 2007, Amendment 1:2011 and Amendment 2:2018. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) new audio data-types of MPEG-D USAC, ACX, ACX HBR2, ACX HBR4 and ACX HBR8 have been added;
b) extended data-type field in Pe has been activated.

The text of this International Standard is based on the following documents:

Draft	Report on voting
100/3459/CDV	100/3541/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

The list of all the parts of the IEC 61937 series, 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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

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- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

~~INTRODUCTION to Amendment 1~~

~~The revision of IEC 61937-2 (2007) has become necessary to define additional data-types, in order to be consistent with the data-type field description in IEC 61937-1 and to clarify the rule and definition of this data-type. Amendment 1 contains the following significant technical changes with respect to the base publication (IEC 61937-2, second edition).~~

- ~~New audio data-types of MPEG-4 ALS, MPEG-4 AAC LC in LATM/LOAS, MPEG-4 HE AAC in LATM/LOAS and DRA are added.~~
- ~~The description of data-type and subdata-type fields in Pc is clarified.~~
- ~~A rule has been defined for new data-types.~~

~~INTRODUCTION to Amendment 2~~

~~The revision of IEC 61937-2:2007 has become necessary to define additional data types. Amendment 2 contains the following significant technical changes with respect to the base publication (IEC 61937-2:2007 and IEC 61937-2:2007/AMD1:2011):~~

~~a) new audio data-types of ATRAC-X low latency, MPEG-H 3D Audio, MPEG-H 3D Audio HBR, AC-4, AC-4 HBR4, AC-4 HBR16, AC-4 LD and MPEG-4 ALS in LATM/LOAS are added;~~

~~b) units of Pd column is added to Table 2;~~

~~c) update SMPTE reference.~~

~~In the next full revision of IEC 61937-2, it is planned to relinquish the use of "Conventional data-type" and "Subdata-type", replacing them with "data-type bits 0 to 4" and "data-type bits 5 to 6", respectively.~~

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

Part 2: Burst-info

1 Scope

This part of IEC 61937 specifies the digital audio interface to convey non-linear PCM encoded audio bitstreams applying IEC 60958-1 and IEC 60958-3. This document specifies burst-info, which defines content information about the data contained in the burst-payload.

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 60958-1, *Digital audio interface – Part 1: General*

IEC 60958-3, *Digital audio interface – Part 3: Consumer applications*

IEC 61937-1:~~2007~~2021, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 1: General*

IEC 61937-3, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 3: Non-linear PCM bitstreams according to the AC-3 format*

IEC 61937-4, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 4: Non-linear PCM bitstreams according to the MPEG audio format*

IEC 61937-5, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 5: Non-linear PCM bitstreams according to the DTS (Digital Theater Systems) format(s)*

IEC 61937-6, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 6: Non-linear PCM bitstreams according to the MPEG-2 AAC and MPEG-4 AAC audio formats*

IEC 61937-7, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 7: Non-linear PCM bitstreams according to the ATRAC, ATRAC2/3 and ATRAC-X formats*

IEC 61937-8~~:2006~~, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 8: Non-linear PCM bitstreams according to the Windows Media Audio (WMA) Professional format*

IEC 61937-9, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 9: Non-linear PCM bitstreams according to the MAT format*

IEC 61937-10, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 10: Non-linear PCM bitstreams according to the MPEG-4 audio lossless coding (ALS) format*

IEC 61937-11, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 11: MPEG-4 AAC and its extensions in LATM/LOAS*

IEC 61937-12, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 12: Non-linear PCM bitstreams according to the DRA formats*

IEC 61937-13, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 13: MPEG-H 3D Audio*

IEC 61937-14, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 14: Non-linear PCM bitstreams according to the AC-4 format*

IEC 61937-15, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 15: Non-linear PCM bit streams according to Auro-Cx format*

~~ISO/IEC 11172-3: *Information technology – Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mb/s – Part 3: Audio*~~

~~ISO/IEC 13818-3, *Information technology – Generic coding of moving pictures and associated audio information – Part 3: Audio*~~

~~ISO/IEC 13818-7, *Information technology – Generic coding of moving pictures and associated audio information – Advanced Audio Coding (AAC)*~~

~~ISO/IEC 14496-3, *Information technology – Coding of audio-visual objects – Part 3: Audio*~~

~~ITU-R Recommendation BS.1196, *Audio coding for digital terrestrial television broadcasting*~~

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

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

Audionumérique – Interface pour les flux de bits audio à codage MIC non linéaire selon l'IEC 60958 – Partie 2: Informations relatives à la salve



IEC 61937-2:2021-03(en-fr)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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IEC 61937-8, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 8: Non-linear PCM bitstreams according to the Windows Media Audio (WMA) Professional format*

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IEC 61937-10, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 10: Non-linear PCM bitstreams according to the MPEG-4 audio lossless coding (ALS) format*

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IEC 61937-14, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 14: Non-linear PCM bitstreams according to the AC-4 format*

IEC 61937-15, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 15: Non-linear PCM bit streams according to Auro-Cx format*

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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AUDIONUMÉRIQUE – INTERFACE POUR LES FLUX DE BITS AUDIO À CODAGE MIC NON LINÉAIRE SELON L'IEC 60958 –

Partie 2: Informations relatives à la salve

AVANT-PROPOS

1) La Commission Electrotechnique Internationale (IEC) est une organisation mondiale de normalisation composée de l'ensemble des comités électrotechniques nationaux (Comités nationaux de l'IEC). L'IEC a pour objet de favoriser la coopération internationale pour toutes les questions de normalisation dans les domaines de l'électricité et de l'électronique. A cet effet, l'IEC – entre autres activités – publie des Normes internationales, des Spécifications techniques, des Rapports techniques, des Spécifications accessibles au public (PAS) et des Guides (ci-après dénommés "Publication(s) de l'IEC"). Leur élaboration est confiée à des comités d'études, aux travaux desquels tout Comité national intéressé par le sujet traité peut participer. Les organisations internationales, gouvernementales et non gouvernementales, en liaison avec l'IEC, participent également aux travaux. L'IEC collabore étroitement avec l'Organisation Internationale de Normalisation (ISO), selon des conditions fixées par accord entre les deux organisations.
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Cette troisième édition annule et remplace la deuxième édition parue en 2007, l'Amendement 1:2011 et l'Amendement 2:2018. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

a) les nouveaux types de données audio MPEG-D USAC, ACX, ACX HBR2, ACX HBR4 et ACX HBR8 ont été ajoutés;
b) le champ de type de données étendu dans Pe a été activé.

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
100/3459/CDV	100/3541/RVC

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette norme.

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous www.iec.ch/members_experts/refdocs. Les principaux types de documents développés par l'IEC sont décrits plus en détail sous www.iec.ch/standardsdev/publications.

Une liste de toutes les parties de la série IEC 61937, publiées sous le titre général *Audionumérique – Interface pour les flux de bits audio à codage MIC non linéaire selon l'IEC 60958*, peut être consultée sur le site web de l'IEC.

Le comité a décidé que le contenu de ce document ne sera pas modifié avant la date de stabilité indiquée sur le site web de l'IEC sous webstore.iec.ch dans les données relatives au document recherché. A cette date, le document sera

- reconduit,
- supprimé,
- remplacé par une édition révisée, ou
- amendé.

AUDIONUMÉRIQUE – INTERFACE POUR LES FLUX DE BITS AUDIO À CODAGE MIC NON LINÉAIRE SELON L'IEC 60958 –

Partie 2: Informations relatives à la salve

1 Domaine d'application

La présente partie de l'IEC 61937 spécifie l'interface audionumérique pour l'acheminement des flux de bits audio à codage MIC non linéaire selon l'IEC 60958-1 et l'IEC 60958-3. Le présent document spécifie les informations relatives à la salve, qui définissent les informations de contenu concernant les données contenues dans la charge utile de la salve.

2 Références normatives

Les documents suivants sont cités dans le texte de sorte qu'ils constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60958-1, *Interface audionumérique – Partie 1: Généralités*

IEC 60958-3, *Digital audio interface – Part 3: Consumer applications* (disponible en anglais seulement)

IEC 61937-1:2021, *Audionumérique – Interface pour les flux de bits audio à codage MIC non linéaire selon l'IEC 60958 – Partie 1: Généralités*

IEC 61937-3, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 3: Non-linear PCM bitstreams according to the AC-3 format* (disponible en anglais seulement)

IEC 61937-4, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 4: Non-linear PCM bitstreams according to the MPEG audio format* (disponible en anglais seulement)

IEC 61937-5, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 5: Non-linear PCM bitstreams according to the DTS (Digital Theater Systems) format(s)* (disponible en anglais seulement)

IEC 61937-6, *Audionumérique – Interface pour les flux de bits audio à codage MIC non linéaire conformément à l'IEC 60958 – Partie 6: Flux de bits MIC non linéaire selon les formats MPEG-2 AAC et MPEG-4 AAC*

IEC 61937-7, *Audionumérique – Interface pour les flux de bits audio à codage MIC non linéaire conformément à l'IEC 60958 – Partie 7: Flux de bits MIC non linéaire selon les formats ATRAC, ATRAC2/3 et ATRAC-X*

IEC 61937-8, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 8: Non-linear PCM bitstreams according to the Windows Media Audio (WMA) Professional format* (disponible en anglais seulement)

IEC 61937-9, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 9: Non-linear PCM bitstreams according to the MAT format* (disponible en anglais seulement)

IEC 61937-10, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 10: Non-linear PCM bitstreams according to the MPEG-4 audio lossless coding (ALS) format* (disponible en anglais seulement)

IEC 61937-11, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 11: MPEG-4 AAC and its extensions in LATM/LOAS* (disponible en anglais seulement)

IEC 61937-12, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 12: Non-linear PCM bitstreams according to the DRA formats* (disponible en anglais seulement)

IEC 61937-13, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 13: MPEG-H 3D Audio* (disponible en anglais seulement)

IEC 61937-14, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 14: Non-linear PCM bitstreams according to the AC-4 format* (disponible en anglais seulement)

IEC 61937-15, *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 – Part 15: Non-linear PCM bit streams according to Auro-Cx format* (disponible en anglais seulement)