
Digitalni avdio - Vmesnik za nelinearne PCM-kodirane avdio bitne struje po standardu IEC 60958 - 5. del: Nelinearne PCM bitne struje v skladu s formatom(-i) DTS (digitalni gledališki sistem(-i) (IEC 61937-5:2006)

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)

Digitalton - Schnittstelle für nichtlinear-PCM-codierte Audio-Bitströme unter Verwendung von IEC 60958 -- Teil 5: Nichtlineare PCM-Bitströme für DTS (Digitale Theatersysteme)-Format(e)

[SIST EN 61937-5:2007](https://standards.iteh.ai/catalog/standards/sist/6bbc5dc8-899e-4602-b98c-0c0000000000/sist-en-61937-5-2007)

Audionumérique - Interface pour les flux de bits audio à codage PCM (MIC) non linéaire conformément à la CEI 60958 -- Partie 5: Flux de bits PCM non linéaire conformément aux formats DTS (Systèmes numériques pour salles de spectacle)

Ta slovenski standard je istoveten z: EN 61937-5:2006

ICS:

| | | |
|-----------|---------------------------------|---|
| 33.160.30 | Avdio sistemi | Audio systems |
| 35.200 | Vmesniška in povezovalna oprema | Interface and interconnection equipment |

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61937-5

November 2006

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Supersedes EN 61937-5:2002

English version

**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 61937-5:2006)**

Audionumérique -
Interface pour les flux de bits audio
à codage PCM (MIC) non linéaire
conformément à la CEI 60958
Partie 5: Flux de bits PCM non linéaire
conformément aux formats DTS
(Systèmes numériques pour salles
de spectacle)
(CEI 61937-5:2006)

Digitalton -
Schnittstelle für nichtlinear-PCM-codierte
Audio-Bitströme unter Verwendung
von IEC 60958
Teil 5: Nichtlineare PCM-Bitströme
für DTS (Digitale Theatersysteme)-
Format(e)
(IEC 61937-5:2006)

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This European Standard was approved by CENELEC on 2006-11-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in two official versions (English and German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the International Standard IEC 61937-5:2006, prepared by IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the formal vote and was approved by CENELEC as EN 61937-5 on 2006-11-01 without any modification.

This European Standard supersedes EN 61937-5:2002.

This edition includes the following significant technical changes with respect to EN 61937-5:2002:

- references to the company name Digital Theater Systems have been changed to DTS which is consistent with the official change of the company name;
- DTS type IV has been added to Table 1 and 5.3.4 describing type IV has been added;
- Annex A, which provides examples of the use of the repetition period parameter introduced in subclause 5.3.4, has been added.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2007-11-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2009-11-01

Annex ZA has been added by CENELEC.

SIST EN 61937-5:2007
<https://standards.iteh.ai/standards.iteh.ai> **Endorsement notice** 899e-4602-b98c-d1f7cdb19dfa/sist-en-61937-5-2007

The text of the International Standard IEC 61937-5:2006 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-----------------|--|--------------|--------------------|
| IEC 60958-1 | - ¹⁾ | Digital audio interface Part 1: General | EN 60958-1 | 2004 ²⁾ |
| IEC 60958-3 | - ¹⁾ | Digital audio interface Part 3: Consumer applications | EN 60958-3 | 2006 ²⁾ |
| IEC 60958-4 | - ¹⁾ | Digital audio interface Part 4: Professional applications (TA4) | EN 60958-4 | 2003 ²⁾ |
| IEC 61937-1 | - ¹⁾ | Digital audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 Part 1: General | EN 61937-1 | 2003 ²⁾ |
| IEC 61937-2 | - ¹⁾ | Digital audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 Part 2: Burst-info | EN 61937-2 | 2003 ²⁾ |

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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INTERNATIONAL STANDARD

IEC 61937-5

Second edition
2006-01

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Part 5: Non-linear PCM bitstreams according to the DTS (Digital Theater Systems) format(s)

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**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)**

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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International Standard IEC 61937-5 has been prepared by Technical Area 4: Digital system interfaces and protocols, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This second edition cancels and replaces the first edition published in 2002. This edition constitutes a technical revision.

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

- a) References to the company name Digital Theater Systems have been changed to DTS which is consistent with the official change of the company name.

- b) DTS type IV has been added to Table 1 and 5.3.4 describing type IV has been added.
- c) Annex A, which provides examples of the use of the repetition period parameter introduced in subclause 5.3.4, has been added.

The text of this standard is based on the following documents:

| | |
|-------------|------------------|
| CDV | Report on voting |
| 100/974/CDV | 100/1055/RVC |

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

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

IEC 61937 consists of the following parts, under the general title *Digital audio – Interface for non-linear PCM encoded audio bitstreams applying IEC 60958*:

- Part 1: General
- Part 2: Burst-info
- Part 3: Non-linear PCM bitstreams according to the AC-3 format
- Part 4: Non-linear PCM bitstreams according to the MPEG audio formats
- Part 5: Non-linear PCM bitstreams according to the DTS (Digital Theater Systems) format(s)
- Part 6: Non-linear PCM bitstreams according to the ATRAC, ATRAC2/3 and ATRAC-X formats
- Part 8: Non-linear PCM bitstreams according to the Windows Media Audio Professional¹

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

¹ To be published.

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

Part 5: Non-linear PCM bitstreams according to the (Digital Theater Systems) DTS format(s)

1 Scope

This part of IEC 61937 describes audio bitstreams encoded according to the Digital Theater Systems (DTS) format data-types I, II, III, and IV.

2 Normative references

The following referenced documents are indispensable for the application 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 60958-4, *Digital audio interface – Part 4: Professional applications*

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 Information*

3 Terms, definitions, abbreviations and presentation convention

For the purposes of this document, the following terms, definitions, abbreviations and presentation convention apply.

3.1 Definitions

3.1.1 latency

delay time of an external audio decoder to decode a DTS data-burst, defined as the sum of two values of the receiving delay time and the decoding delay time

3.2 Abbreviations

| | |
|--------------|--|
| IEC | International Electrotechnical Commission |
| ISO/IEC MPEG | The Moving Pictures Expert Group, a joint committee of ISO and IEC |