

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)

The European Standard EN 61937-5:2006 has the status of a
British Standard

ICS 33.160.60

National foreword

This British Standard was published by BSI. It is the UK implementation of EN 61937-5:2006. It is identical with IEC 61937-5:2006. It supersedes BS EN 61937-5:2002, which will be withdrawn on 1 November 2009.

The UK participation in its preparation was entrusted to Technical Committee EPL/100, Audio, video and multimedia systems and equipment.

A list of organizations represented on EPL/100 can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 January 2007

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ISBN 978 0 580 49903 6

Amendments issued since publication

Amd. No.	Date	Comments

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)

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.

Endorsement notice

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

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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