



**NSAI**  
Standards

Irish Standard  
I.S. EN 61937-11:2010

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 61937-11:2010 (EQV))

## I.S. EN 61937-11:2010

*Incorporating amendments/corrigenda issued since publication:*

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**EN 61937-11**

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English version

**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 61937-11:2010)**

Audionumérique -  
Interface pour les flux de bits audio  
à codage MIC non linéaire  
conformément à la CEI 60958 -  
Partie 11 : MPEG-4 AAC  
et ses extensions en LATM/LOAS  
(CEI 61937-11:2010)

Digitalton – Schnittstelle für nichtlinear-  
PCM-codierte Audio-Bitströme  
unter Verwendung von IEC 60958 –  
Teil 11: MPEG-4-AAC  
und dessen Erweiterungen in LATM/LOAS  
(IEC 61937-11:2010)

This European Standard was approved by CENELEC on 2010-06-01. 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.

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

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## **Foreword**

The text of document 100/1491/CDV, future edition 1 of IEC 661937-11, prepared by IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61937-11 on 2010-06-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- |  |       |            |
|--|-------|------------|
| – latest date by which the EN has to be implemented<br>at national level by publication of an identical<br>national standard or by endorsement | (dop) | 2011-03-01 |
| – latest date by which the national standards conflicting<br>with the EN have to be withdrawn  | (dow) | 2013-06-01 |

Annex ZA has been added by CENELEC.

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## **Endorsement notice**

The text of the International Standard IEC 61937-11:2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

- |                  |      |   |
|------------------|------|---|
| IEC 61937 series | NOTE | Harmonized in EN 61937 series (not modified). |
| IEC 61937-6      | NOTE | Harmonized as EN 61937-6.                     |
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## 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	Series	Digital audio interface	EN 60958	Series
IEC 61937-1	-	Digital audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 - Part 1: General	EN 61937-1	-
IEC 61937-2	-	Digital audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 - Part 2: Burst-info	EN 61937-2	-
ISO/IEC 14496-3	2009	Information technology - Coding of audio-visual objects - Part 3: Audio	-	-

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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 11: MPEG-4 AAC and its extensions in LATM/LOAS****FOREWORD**

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International Standard IEC 61937-11 has been prepared by technical area 4: Digital system interfaces and protocols, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

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

CDV	Report on voting
100/1491/CDV	100/1580/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.



A list of all parts of IEC 61937, 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 publication will remain unchanged until the stability 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.

## INTRODUCTION

Modern digital video broadcasting standards such as DVB include support for the MPEG-4 HE AAC and/or HE AAC v2 audio codecs as specified in ISO/IEC 14496-3. An increasing number of countries are adopting these new codecs for their standard definition and high definition digital video broadcasting services and have started with implementations.

For MPEG-2 AAC audio (ISO/IEC 13818-7) the specified framing format for the audio bit stream is ADTS and its transport over an IEC 60958 interface is specified in IEC 61937-6.

However, the MPEG-4 (ISO/IEC 14496-3) audio codecs introduce new features and capabilities that require a framing format that supports more flexible signaling and delivery mechanisms. Therefore, MPEG-2 Systems (ISO/IEC 13818-1) specifies the MPEG-4 LATM/LOAS framing format for MPEG-4 audio codecs to overcome the limitations of ADTS.

In order to be able to pass the MPEG-4 audio bit stream from a Set Top Box to an A/V receiver connected via the IEC 60958 interface without needing to reframe the audio bit stream within ADTS, the MPEG-4 LATM/LOAS framing format needs to be supported by IEC 61937.

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