

Irish Standard I.S. EN 60958-1:2008&A1:2014

## Digital audio interface -- Part 1: General

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#### I.S. EN 60958-1:2008&A1:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN 60958-1:2008/A1:2014

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**EUROPEAN STANDARD** 

EN 60958-1:2008/A1

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

July 2014

ICS 33.160.01

#### **English Version**

Digital audio interface - Part 1: General (IEC 60958-1:2008/A1:2014)

Interface audionumérique - Partie 1: Généralités (CEI 60958-1:2008/A1:2014)

Digitalton-Schnittstelle - Teil 1: Allgemeines (IEC 60958-1:2008/A1:2014)

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#### **Foreword**

The text of document 100/2164/CDV, future IEC 60958-1:2008/A1, prepared by IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60958-1:2008/A1:2014.

The following dates are fixed:

•	latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2015-03-03
•	latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2017-06-03

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IEC 60874-1	NOTE	Harmonised as EN 60874-1.
IEC 61937-3	NOTE	Harmonised as EN 61937-3.

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IEC 61937-4	NOTE	Harmonised as EN 61937-4
IEC 61937-5	NOTE	Harmonised as EN 61937-5.
IEC 61937-6	NOTE	Harmonised as EN 61937-6.
IEC 61937-7	NOTE	Harmonised as EN 61937-7.
IEC 61937-8	NOTE	Harmonised as EN 61937-8.
IEC 61937-9	NOTE	Harmonised as EN 61937-9.

**EUROPEAN STANDARD** 

EN 60958-1

NORME EUROPÉENNE EUROPÄISCHE NORM

October 2008

ICS 33.160.01

Supersedes EN 60958-1:2004

English version

Digital audio interface -Part 1: General (IEC 60958-1:2008)

Interface audionumérique -Partie 1: Généralités (CEI 60958-1:2008) Digitalton-Schnittstelle -Teil 1: Allgemeines (IEC 60958-1:2008)

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

#### **Foreword**

The text of document 100/1252/CDV, future edition 3 of IEC 60958-1, 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 60958-1 on 2008-10-01.

This European Standard supersedes EN 60958-1:2004.

It includes the following significant changes with respect to EN 60958-1:2004:

Electrical and optical requirements are removed from EN 60958-3; they are specified in EN 60958-1.

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)
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with the EN have to be withdrawn (dow) 2011-10-01

Annex ZA has been added by CENELEC.

#### **Endorsement notice**

2009-07-01

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IEC 60793-2	NOTE	Harmonized as EN 60793-2:2008 (not modified).
IEC 60794-2	NOTE	Harmonized as EN 60794-2:2003 (not modified).
IEC 60874-1	NOTE	Harmonized as EN 60874-1:2007 (not modified).
IEC 60958	NOTE	Harmonized in EN 60958 series (not modified).
IEC 61883-6	NOTE	Harmonized as EN 61883-6:2005 (not modified).
IEC 61937-1	NOTE	Harmonized as EN 61937-1:2007 (not modified).
IEC 61937-2	NOTE	Harmonized as EN 61937-2:2007 (not modified).
IEC 61937-3	NOTE	Harmonized as EN 61937-3:2003 (not modified).
IEC 61937-4	NOTE	Harmonized as EN 61937-4:2003 (not modified).
IEC 61937-5	NOTE	Harmonized as EN 61937-5:2006 (not modified).
IEC 61937-6	NOTE	Harmonized as EN 61937-6:2006 (not modified).
IEC 61937-7	NOTE	Harmonized as EN 61937-7:2005 (not modified).
IEC 61937-8	NOTE	Harmonized as EN 61937-8:2007 (not modified).
IEC 61937-9	NOTE	Harmonized as EN 61937-9:2007 (not modified).
IEC 62105	NOTE	Harmonized as EN 62105:2002 (not modified).

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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>	EN/HD	<u>Year</u>
IEC 60268-11	_1)	Sound system equipment - Part 11: Application of connectors for the interconnection of sound system components	HD 483.11 S3	1993 <sup>2)</sup>
IEC 60874-17	_1)	Connectors for optical fibres and cables - Part 17: Sectional specification for fibre optic connector - Type F-05 (friction lock)	EN 60874-17	1997 <sup>2)</sup>
IEC 60958-3	_1)	Digital audio interface - Part 3: Consumer applications	EN 60958-3	2006 <sup>2)</sup>
IEC 60958-4	_1)	Digital audio interface - Part 4: Professional applications	EN 60958-4	2003 <sup>2)</sup>

<sup>1)</sup> Undated reference.

<sup>&</sup>lt;sup>2)</sup> Valid edition at date of issue.

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## IEC 60958-1

Edition 3.0 2008-09

# INTERNATIONAL STANDARD

Digital audio interface – Part 1: General





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IEC 60958-1

Edition 3.0 2008-09

# INTERNATIONAL STANDARD

Digital audio interface – Part 1: General

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### **DIGITAL AUDIO INTERFACE -**

Part 1: General

#### **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 60958-1 has been prepared by IEC technical committee 100: Audio, video and multimedia systems and equipment.

This third edition of IEC 60958-1 cancels and replaces the second edition published in 2004 and constitutes a technical revision.

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

Electrical and optical requirements are removed from IEC 60958-3; they are specified in IEC 60958-1.

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

CDV	Report on voting	
100/1252/CDV	100/1337/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 the IEC 60958 series, under the general title *Digital audio interface*, can be found on the IEC website.

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.

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#### **DIGITAL AUDIO INTERFACE -**

Part 1: General

#### 1 Scope

This part of IEC 60958 describes a serial, uni-directional, self-clocking interface for the interconnection of digital audio equipment for consumer and professional applications.

It provides the basic structure of the interface. Separate documents define items specific to particular applications.

The interface is primarily intended to carry monophonic or stereophonic programmes, encoded using linear PCM and with a resolution of up to 24 bits per sample.

When used for other purposes, the interface is able to carry audio data coded other than as linear PCM coded audio samples. Provision is also made to allow the interface to carry data related to computer software or signals coded using non-linear PCM. The format specification for these applications is not part of this standard.

The interface is intended for operation at audio sampling frequencies of 32kHz and above. Auxiliary information is transmitted along with the programme.

#### 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 60268-11, Sound system equipment – Part 11: Application of connectors for the interconnection of sound system components

IEC 60874-17, Connectors for optical fibres and cables – Part 17: Sectional specification for fibre optic connector – Type F-05 (friction lock)

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

IEC 60958-4, Digital audio interface – Part 4: Professional applications

#### 3 Terms and definitions

For the purpose of this International Standard, the following terms and definitions apply.

#### 3.1

#### sampling frequency

frequency of the samples representing an audio signal

NOTE When more than one signal is transmitted through the same interface, the sampling frequencies are identical.



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