SLOVENSKI STANDARD
SIST EN 60958-1:2006

01-januar-2006

Nadomešča:
SIST EN 60958-1:2001

Digitalni zvokovni vmesnik – 1. del: Splošno (IEC 60958-1:2004)

Digital audio interface -- Part 1: General

Digitalton-Schnittstelle -- Teil 1: Allgemeines

Interface audionumérique -- Partie 1: Généralités

Ta slovenski standard je istoveten z: EN 60958-1:2004

ICS:

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

SIST EN 60958-1:2006 **en**

EUROPEAN STANDARD **EN 60958-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM October 2004

ICS 33.160.01

Supersedes EN 60958-1:2000

English version

Digital audio interface
Part 1: General
(IEC 60958-1:2004)

Interface audionumérique
Partie 1: Généralités
(CEI 60958-1:2004)

Digitalton-Schnittstelle
Teil 1: Allgemeines
(IEC 60958-1:2004)

This European Standard was approved by CENELEC on 2004-09-01. 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 three official versions (English, French, 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, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and 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

Ref. No. EN 60958-1:2004 E

Foreword

The text of the International Standard IEC 60958-1:2004, 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 60958-1 on 2004-09-01 without any modification.

This European Standard supersedes EN 60958-1:2000.

All changes introduced in this European Standard compared to EN 60958-1:2000 intend to clarify the structure and the relationship between all of the EN 60958 series families.

A brief list of changes includes:

– Annex B has been added to explain the definition given in 5.3 in relation of the families of the EN 60958 series. Subclause 5.3 is also added to this description;

– Annex C has been added to explain the relationship of the EN 60958 series families;

– Annex D has been added as an explanation for a data transmission other than linear PCM;

– Subclause 5.4 has been added to define category code application;

– a bibliography 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) 2005-09-01

– latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2007-09-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60958-1:2004 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 61883-6	NOTE	Harmonized as EN 61883-6:2002 (not modified).
IEC 61937	NOTE	Harmonized in EN 61937 series (not modified).
IEC 62105	NOTE	Harmonized as EN 62105:2002 (not modified).

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

Publication	Year	Title	EN/HD	Year
IEC 60958-3	- [1)]	Digital audio interface Part 3: Consumer applications	EN 60958-3	2003 [2)]
IEC 60958-4	- [1)]	Part 4: Professional applications (TA4)	EN 60958-4	2003 [2)]

[1)] Undated reference.

[2)] Valid edition at date of issue.

INTERNATIONAL STANDARD

IEC 60958-1

Second edition
2004-03

Digital audio interface –

Part 1: General

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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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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9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 60958-1, edition 2 has been prepared by Technical Area 4, Digital system interfaces, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This second edition of IEC 60958-1 cancels and replaces the first edition published in 1999 and constitutes a technical revision.

All changes introduced in this second edition of IEC 60958-1 intend to clarify the structure and the relationship between all of IEC 60958 series families.

A brief list of changes include:

- Annex B has been added to explain the definition given in 5.3 with relation of the families of the IEC 60958 series. Clause 5.3 is also added to this description.
- Annex C has been added to explain the relationship of the IEC 60958 series families.
- Annex D has been added as an explanation for a data transmission other than linear PCM.
- Subclause 5.4 has been added to define category code appliance.
- A Bibliography has been added.

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

CDV	Report on voting
100/552/CDV	100/755/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 60958 consists of the following parts under the general title *Digital audio interface*:

Part 1: General

Part 3: Consumer applications

Part 4: Professional applications

The committee has decided that the contents of this publication will remain unchanged until 2006. At this date, the publication will be

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

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

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 specifies 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 32 kHz 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 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 all parts of the IEC 60958 series, 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.

3.2
audio sample word
value of a digital audio sample. Representation is linear in 2s complement binary form

NOTE Positive numbers correspond to positive analogue voltages at the input of the Analogue-to-Digital Converter (ADC).