



SLOVENSKI STANDARD

SIST EN 60958-1:2001

01-marec-2001

Nadomešča:

SIST EN 60958:1999

SIST EN 60958:1999/A1:1999

SIST EN 60958:1999/A2:1999

Digital audio interface - Part 1: General (IEC 60958-1:1999)

Digital audio interface -- Part 1: General

Digitalton-Schnittstelle -- Teil 1: Allgemeines

Interface audionumérique -- Partie 1: Généralités

<https://standards.iteh.ai/catalog/standards/sist/414052a2-0b74-4663-a12b-ef4ab9bda909/sist-en-60958-1-2001>

Ta slovenski standard je istoveten z: **EN 60958-1:2000**

ICS:

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

SIST EN 60958-1:2001

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60958-1:2001

<https://standards.iteh.ai/catalog/standards/sist/414052a2-0b74-4663-a12b-ef1ab9bda909/sist-en-60958-1-2001>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60958-1

March 2000

ICS 33.160.01

Supersedes EN 60958:1990 and its amendments

English version

**Digital audio interface
Part 1: General
(IEC 60958-1:1999)**

Interface audionumérique
Partie 1: Généralités
(CEI 60958-1:1999)

Digitalton-Schnittstelle
Teil 1: Allgemeines
(IEC 60958-1:1999)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60958-1:2001

<https://standards.iteh.ai/catalog/standards/sist/414052a2-0b74-4663-a12b-ef1ab9bda909/sist-en-60958-1-2001>

This European Standard was approved by CENELEC on 2000-01-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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

Foreword

The text of document 100C/246/FDIS, future edition 1 of IEC 60958-1, prepared by SC 100C, Audio, video and multimedia subsystems and equipment, of 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 2000-01-01.

This European Standard supersedes EN 60958:1990 and its amendments A1:1994 + A2:1995.

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) 2000-10-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2003-01-01

Endorsement notice

The text of the International Standard IEC 60958-1:1999 was approved by CENELEC as a European Standard without any modification.

ITEH STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60958-1:2001

<https://standards.iteh.ai/catalog/standards/sist/414052a2-0b74-4663-a12b-ef1ab9bda909/sist-en-60958-1-2001>

NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC

60958-1

Première édition
First edition
1999-12

Interface audionumérique –

Partie 1:
Généralités

iteh STANDARD PREVIEW

Digital audio interface –
(standards.iteh.ai)
Part 1:
General

SIST EN 60958-1:2001

<https://standards.iteh.ai/catalog/standards/sist/414052a2-0b74-4663-a12b-eflab9bda909/sist-en-60958-1-2001>

© IEC 1999 Droits de reproduction réservés — Copyright - all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photo-copie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission
Telefax: +41 22 919 0300

e-mail: inmail@iec.ch

3, rue de Varembé Geneva, Switzerland
IEC web site <http://www.iec.ch>



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

M

Pour prix, voir catalogue en vigueur
For price, see current catalogue

CONTENTS

	Page
FOREWORD	5
Clause	
1 Scope	9
2 Normative references	9
3 Terms and definitions	9
4 Interface format.....	13
4.1 Structure of format	13
4.2 Channel coding	17
4.3 Preambles	17
4.4 Validity bit	19
5 Channel status	19
5.1 General.....	19
5.2 Applications	19
6 User data	23
6.1 General.....	23
6.2 Applications	23
7 Electrical requirements	23
Annex A (informative) The use of the validity bit.....	25
Figure 1 – Sub-frame format (linear PCM application)	15
Figure 2 – Frame format	15
Figure 3 – Channel coding	17
Figure 4 – Preamble M (shown as 11100010).....	19
Table 1 – Preamble coding	17
Table 2 – Channel status data format.....	21

iTeh STANDARD PREVIEW

(standards.iteh.ai)

SIST EN 60958-1:2001

[https://standards.iteh.ai/catalog/standards/sist/414052a2-0b74-4663-a12b-](https://standards.iteh.ai/catalog/standards/sist/414052a2-0b74-4663-a12b-ef1ab9bda909/sist-en-60958-1-2001)[ef1ab9bda909/sist-en-60958-1-2001](https://standards.iteh.ai/catalog/standards/sist/414052a2-0b74-4663-a12b-ef1ab9bda909/sist-en-60958-1-2001)

INTERNATIONAL ELECTROTECHNICAL COMMISSION

DIGITAL AUDIO INTERFACE –

Part 1: General

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard 60958-1 has been prepared by subcommittee 100C: Audio, video and multimedia subsystems and equipment, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

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

FDIS	Report on voting
100C/246/FDIS	100C/253/RVD

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 3.

IEC 60958 consists of the following parts under the general title: Digital audio interface:

Part 1: General

Part 2 (TR): Software information delivery mode

Part 3: Consumer applications

Part 4: Professional applications

Annex A is for information only.

The committee has decided that this publication remains valid until 2002.

At this date, in accordance with the committee's decision, the publication will be

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

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60958-1:2001

<https://standards.iteh.ai/catalog/standards/sist/414052a2-0b74-4663-a12b-ef1ab9bda909/sist-en-60958-1-2001>

DIGITAL AUDIO INTERFACE –

Part 1: General

1 Scope

This International Standard describes a serial, uni-directional, self-clocking interface for the interconnection of digital audio equipment for consumer and professional applications, using linear PCM coded audio samples.

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

When used in a professional application, the interface is primarily intended to carry monophonic or stereophonic programmes, at a 48 kHz sampling frequency and with a resolution of up to 24 bits per sample; it may alternatively be used to carry signals sampled at 32 kHz or 44,1 kHz.

When used in a consumer application, the interface is primarily intended to carry stereophonic programmes, with a resolution of up to 20 bits per sample, an extension to 24 bits per sample being possible.

When used for other purposes, the interface is primarily intended 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.

In all cases, the clock references and auxiliary information are transmitted along with the programme.

2 Normative references

None.

3 Terms and definitions

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

3.1

sampling frequency

the frequency of the samples representing an audio signal. When more than one signal is transmitted through the same interface, the sampling frequencies are identical

3.2

audio sample word

the value of a digital audio sample. Representation is linear in 2's complement binary form. Positive numbers correspond to positive analogue voltages at the input of the analogue-to-digital converter (ADC)