SVENSK STANDARD SS-EN IEC 60958-1

Utgåva 4

2022-02-16



REDLINE VERSION

# Audiovisuell teknik – Gränssnitt för digitaliserat ljud – Del 1: Allmänt

*Digital audio interface – Part 1: General*

En så kallad ”Redline version” (RLV) innehåller både den fastställda IEC-standarden och en ändringsmarkerad standard. Alla tillägg och borttagningar sedan den tidigare utgåvan är markerade med färg. Med en RLV sparar du mycket tid när du ska identifiera och bedöma aktuella ändringar i standarden. SEK Svensk Elstandard kan bara ge ut en RLV i de fall den finns tillgänglig från IEC.

# IEC 60958-1

Edition 4.0 2021-09
REDLINE VERSION

# INTERNATIONAL STANDARD

colour inside

## Digital audio interface –
## Part 1: General

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 33.160.01

ISBN 978-2-8322-1023-9

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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# 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.

**This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 60958-1:2008+AMD1:2014 CSV. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.**

IEC 60958-1 has been prepared by technical area 20: Analogue and digital audio, of IEC technical committee 100: Audio, video and multimedia systems and equipment. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2008, and Amendment 1:2014. This edition constitutes a technical revision.

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

a) The relevant part of IEC 60958-5 is supported.

The text of this International Standard is based on the following documents:

| Draft | Report on voting |
|---|---|
| 100/3544/CDV | 100/3593/RVC |

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

A list of all parts of the IEC 60958 series, under the general title *Digital audio interface*, can be found on the IEC website.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

**IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.**

~~INTRODUCTION to Amendment 1~~

~~The revision of IEC 60958-1:2008 has become necessary in order to revise Annexes B and C, and the Bibliography. Additional information for the use of the IEC 60958 conformant data format has also been included.~~

# 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, multimedia technologies, or signals coded using non-linear PCM. The format specification for these applications is not part of this document.

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 documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60268-11:1987, *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 (all parts), *Digital audio interface – Part 4: Professional applications*

IEC 60958-5, *Digital audio interface – Part 5: Consumer application enhancement*

SVENSK STANDARD SS-EN IEC 60958-1

| Fastställd | Utgåva | Sida | Ansvarig kommitté |
|---|---|---|---|
| 2022-02-16 | 4 | 1 (1+32) | SEK TK 100 |




# Audiovisuell teknik – Gränssnitt för digitaliserat ljud – Del 1: Allmänt

*Digital audio interface – Part 1: General*

Som svensk standard gäller europastandarden EN IEC 60958-1:2021. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 60958-1:2021.

**Nationellt förord**

Europastandarden EN IEC 60958-1:2021

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 60958-1, Fourth edition, 2021 - Digital audio interface - Part 1: General**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60958-1, utgåva 3, 2009 med ändring SS-EN 60958-1/A1:2014, gäller ej fr o m 2024-10-06.

ICS 33.160.01

Denna standard är fastställd av SEK Svensk Elstandard,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
Postadress: Box 1284, 164 29 KISTA
Telefon: 08 - 444 14 00.
E-post: sek@elstandard.se. Internet: www.elstandard.se

## *Standarder underlättar utvecklingen och höjer elsäkerheten*

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

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SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

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Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN IEC 60958-1

October 2021

ICS 33.160.01

Supersedes EN 60958-1:2008 and all of its amendments and corrigenda (if any)

English Version

# Digital audio interface - Part 1: General (IEC 60958-1:2021)

Interface audionumérique - Partie 1: Généralités (IEC 60958-1:2021)

Digitalton-Schnittstelle - Teil 1: Allgemeines (IEC 60958-1:2021)

This European Standard was approved by CENELEC on 2021-10-06. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**



Ref. No. EN IEC 60958-1:2021 E

# European foreword

The text of document 100/3544/CDV, future edition 4 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 approved by CENELEC as EN IEC 60958-1:2021.

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) 2022–07–06
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024–10–06

This document supersedes EN 60958-1:2008 and all of its amendments and corrigenda (if any).

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

Any feedback and questions on this document should be directed to the users’ national committee. A complete listing of these bodies can be found on the CENELEC website.

## Endorsement notice

The text of the International Standard IEC 60958-1:2021 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 60793-2 | NOTE Harmonized as EN IEC 60793-2 |
| IEC 60794-2 | NOTE Harmonized as EN 60794-2 |
| IEC 60874-1 (series) | NOTE Harmonized as EN 60874-1 (series) |
| IEC 61883-6:2014 | NOTE Harmonized as EN 61883-6:2014 (not modified) |
| IEC 62105:1999 | NOTE Harmonized as EN 62105:2002 (not modified) |

# Annex ZA
(normative)

## Normative references to international publications with their corresponding European publications

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NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

| Publication | Year | Title | EN/HD | Year |
|---|---|---|---|---|
| IEC 60268-11 | 1987 | Sound system equipment - Part 11: Application of connectors for the interconnection of sound system components | HD 483.11 S3 | 1993 |
| IEC 60958-3 | - | Digital audio interface - Part 3: Consumer-applications | | - |
| IEC 60958-4 | series | Digital audio interface - Part 4–1: Professional applications | EN 60958-4 | series |
| IEC 60958-5 | - | Digital audio interface - Part 5: Consumer application enhancement | EN IEC 60958-5 | - |

IEC 60958-1

Edition 4.0 2021-09

# INTERNATIONAL STANDARD

## Digital audio interface – Part 1: General

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 33.160.01

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