Digital audio interface

Part 1: General
National foreword

This British Standard is the UK implementation of EN IEC 60958-1:2021. It is identical to IEC 60958-1:2021. It supersedes BS EN 60958-1:2008+A1:2014, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/100, Audio-visual equipment.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Amendments/corrigenda issued since publication

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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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024–10–06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)
Normative references to international publications
with their corresponding European publications

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.

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.

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INTERNATIONAL
STANDARD

Digital audio interface –
Part 1: General
INTERNATIONAL STANDARD

Digital audio interface –
Part 1: General
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FOREWORD

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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 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:

<table>
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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.
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 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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at http://www.iso.org/obp

3.1 sampling frequency
frequency of the samples representing an audio signal