# IEC 60958-3

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# INTERNATIONAL STANDARD

colour inside

## Digital audio interface –
## Part 3: Consumer applications

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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# DIGITAL AUDIO INTERFACE –

# Part 3: Consumer applications

## FOREWORD

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**This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 60958-3:2006+AMD1:2009+AMD2:2015 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 60958-3 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 2006, Amendment 1:2009 and Amendment 2:2015. 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 |
|---|---|
| 100/3543/CDV | 100/3594/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 in the IEC 60958 series, published 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- withdrawn,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 60958-3 (2006) has become necessary to transmit the audio signal and its information of the current improved audio formats and systems. The revised items apply to the small parts of IEC 60958-3.~~

~~Additional sampling frequencies have been defined for the use of audio transmission of IEC 60958 conformant data format for the new formats of the IEC 61937 series.~~

~~CGMS-A validity is added to clarify the use of CGMS-A information.~~

~~The identification of the embedded MPEG Surround information to LPCM and its normative Annex U are added.~~

~~Table 2 includes the new additions and Table 3 has been clarified.~~

## ~~INTRODUCTION to Amendment 2~~

~~The revision of IEC 60958-3:2006 has become necessary to document the protocol for transmitting the audio signal and its information in current improved audio formats and systems.~~

~~To apply IEC 60958-3 and its IEC 60958 conformant data format transmitting as part or whole of the multichannel audio data, a general channel assignment number specified in IEC 62574 is added to the C-bit.~~

**~~Loudness information is added to the U-bit to enable loudness control.~~**

# DIGITAL AUDIO INTERFACE –

# Part 3: Consumer applications

## 1 Scope

This part of IEC 60958 specifies the consumer application of the interface for the inter-connection of digital audio equipment defined in IEC 60958-1.

NOTE When used in a consumer digital processing environment, 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.

## 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 60841:1988, *Audio recording – PCM encoder/decoder system*~~

~~IEC 60908:1999, *Audio recording – Compact disc digital audio system*~~

IEC 60958-1~~:2004~~, *Digital audio interface – Part 1*: *General*

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

~~IEC 61119-1:1992, *Digital audio tape cassette system (DAT) – Part 1: Dimensions and characteristics*~~

~~IEC 61119-6:1992, *Digital audio tape cassette system (DAT) – Part 6: Serial copy management system*~~

~~IEC 62574:2011, *Audio, video and multimedia systems – General channel assignment of multichannel audio*~~

~~IEEE 1394:2004, *IEEE standard for high-performance serial bus bridges*~~

~~ISO/IEC 23003-1, *Information technology – MPEG audio technologies – Part 1: MPEG Surround*~~

# IEC 60958-3

Edition 4.0 2021-09

# INTERNATIONAL STANDARD

## Digital audio interface –
## Part 3: Consumer applications



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# DIGITAL AUDIO INTERFACE –

## Part 3: Consumer applications

## FOREWORD

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IEC 60958-3 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 2006, Amendment 1:2009 and Amendment 2:2015. 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 |
|---|---|
| 100/3543/CDV | 100/3594/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 in the IEC 60958 series, published 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.

# DIGITAL AUDIO INTERFACE –

# Part 3: Consumer applications

## 1 Scope

This part of IEC 60958 specifies the consumer application of the interface for the interconnection of digital audio equipment defined in IEC 60958-1.

NOTE When used in a consumer digital processing environment, 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.

## 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 60958-1, *Digital audio interface – Part 1: General*

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