Digital audio interface - Part 4-2: Professional applications - Metadata and subcode

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NATIONAL FOREWORD

See Eesti standard EVS-EN 60958-4-2:2016 sisaldab Euroopa standardi EN 60958-4-2:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 60958-4-2:2016 consists of the English text of the European standard EN 60958-4-2:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 01.07.2016.	Date of Availability of the European standard is 01.07.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROPEAN STANDARD

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English Version

Digital audio interface - Part 4-2: Professional applications - Metadata and subcode (IEC 60958-4-2:2016)

Interface audionumérique - Partie 4-2: Applications professionnelles - Métadonnées et sous-code (IEC 60958-4-2:2016)

Digitalton-Schnittstelle - Teil 4-2: Professioneller Gebrauch - Metadaten und Subcode (IEC 60958-4-2:2016)

This European Standard was approved by CENELEC on 2016-04-28. 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.

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

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European foreword

The text of document 100/2453/CDV, future edition 1 of IEC 60958-4-2, prepared by Technical Area 4 "Digital system interfaces and protocols", of IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60958-4-2:2016.

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) 2017-01-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-04-28

This document, together with EN 60958-4-1:2016 and EN 60958-4-4:2016, supersedes EN 60958-4:2003.

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

Endorsement notice

The text of the International Standard IEC 60958-4-2:2016 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 60958	NOTE	Harmonized in EN 60958 series.
IEC 62365:2009	NOTE	Harmonized as EN 62365:2009 (not modified).
IEC 62537	NOTE	Harmonized as EN 62537.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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 60958-1	2008	Digital audio interface - Part 1: General	EN 60958-1	2008
+ A1	2014		+ A1	2014
IEC 60958-3	-	Digital audio interface - Part 3: Consumer applications	EN 60958-3	-
IEC 60958-4-1	-	Digital audio interface - Part 4-1: Professional applications - Audio content	EN 60958-4-1	-
IEC 60958-4-4	-	Digital audio interface - Part 4-4: Professional applications - Physical and electrical parameters	EN 60958-4-4	-
ISO/IEC 646	-	Information technology - ISO 7-bit coded character set for information interchange	-	-
ITU-R Recommendation BS.450-3	-	Transmission standards for FM sound broadcasting at VHF	-	-
ITU-T Recommendation J.17	-	Pre-emphasis used on sound-programme circuits	-	-

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INTRODUCTION

The two-channel digital audio interface has been widely used in a variety of professional audio applications that have reached beyond the vision of the original standard. In particular, applications using increased sampling frequencies and alternative physical media.

Separating the standard into independently-maintainable parts allows, for example, additional transmission media to be introduced in the future by revising IEC 60958-4-4 without affecting the other parts of the IEC 60958-4 series. The parts comprise:

Part 4-1: Audio content: defines the format for coding audio used for the audio content. It specifies the semantics of the audio data, including the "validity" flag. It also specifies the sampling frequency by reference to AES5.

Part 4-2: Metadata and subcode: specifies the format for information, metadata, or subcode transmitted with the audio data: principally the "channel status" but also user data and the auxiliary bits. Implementors will note that the current implementation options ("Standard" and "Enhanced") both require that status data be implemented correctly in compliant equipment.

Part 4-4: Physical and electrical parameters: specifies the physical signals that convey the bit stream specified in IEC 60958-1. The transport format is intended for use with shielded twisted-pair cable of conventional design over distances of up to 100 m at frame rates of up to 50 kHz. Longer cable lengths and higher frame rates may be used, but with a rapidly increasing requirement for care in cable selection and possible receiver equalization, or the use of active repeaters. Provision is made in this standard for adapting the balanced terminals to use 75 Ω coaxial cable. Transmission by fibre-optic cable is under consideration.