ICS 33.160.01, 35.200 SLOVENSKÁ TECHNICKÁ NORMA September 2018

STN	**Multimediálne systémy Návod na navrhovanie charakteristík analógových rozhraní na dosiahnutie interoperability**	**STN EN IEC 61938 36 8320**

Multimedia systems - Guide to the recommended characteristics of analogue interfaces to achieve interoperability

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/18

Obsahuje: EN IEC 61938:2018, IEC 61938:2018

Oznámením tejto normy sa od 16.02.2021 ruší
STN EN 61938 (36 8320) z decembra 2013

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61938

March 2018

ICS 33.160.01; 35.200

Supersedes EN 61938:2013

English Version

Multimedia systems - Guide to the recommended characteristics of analogue interfaces to achieve interoperability (IEC 61938:2018)

Systèmes multimédia - Guide des caractéristiques recommandées des interfaces analogiques permettant d'obtenir l'interopérabilité
(IEC 61938:2018)

Multimedia Systeme - Leitfaden für empfohlene Charakteristika analoger Schnittstellen zur Erreichung von Kompatibilität
(IEC 61938:2018)

This European Standard was approved by CENELEC on 2018-02-16. 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

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

EN IEC 61938:2018 (E)

European foreword

The text of document 100/2879/CDV, future edition 3 of IEC 61938, 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 61938:2018.

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)	2018-11-16
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2021-02-16

This document supersedes EN 61938:2013.

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Endorsement notice

The text of the International Standard IEC 61938:2018 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 60027 (series)	NOTE	Harmonized as EN 60027 (series).
IEC 60130-9	NOTE	Harmonized as EN 60130-9.
IEC 61293:1994	NOTE	Harmonized as EN 61293:1994 (not modified).
IEC 62368-1:2014	NOTE	Harmonized as EN 62368-1:2014 (modified).

Annex ZA
(normative)

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.

Publication	Year	Title	EN/HD	Year
IEC 60038	-	IEC standard voltages	EN 60038	-
IEC 60094-2	-	Magnetic tape sound recording and reproducing systems - Part 2: Calibration tapes	EN 60094-2	-
IEC 60268-1	-	Sound system equipment - Part 1: General	HD 483.1 S2	-
IEC 60268-3	-	Sound system equipment - Part 3: Amplifiers	EN 60268-3	-
IEC 60268-5	-	Sound system equipment - Part 5: Loudspeakers	EN 60268-5	-
IEC 60268-7	2010	Sound system equipment - Part 7: Headphones and earphones	EN 60268-7	2011
IEC 60268-11	1987	Sound system equipment - Part 11: Application of connectors for the interconnection of sound system components	HD 483.11 S1	1990
+ A1	1989		HD 483.11 S2	1991
+ A2	1991		HD 483.11 S3	1993
IEC 60268-12	-	Sound system equipment - Part 12: Application of connectors for broadcast and similar use	EN 60268-12	-
IEC 60603-11	1992	Connectors for frequencies below 3 MHz for use with printed boards - Part 11: Detail specification for concentric connectors (dimensions for free connectors and fixed connectors)	-	-
IEC 60958	series	Digital audio interface	EN 60958	series
ITU-R BT.1700	2005	Characteristics of composite video signals for conventional analogue television systems	-	-

IEC 61938

Edition 3.0 2018-01

INTERNATIONAL STANDARD

Multimedia systems – Guide to the recommended characteristics of analogue interfaces to achieve interoperability

IEC 61938:2018-01(en)

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65 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

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IEC 61938

Edition 3.0 2018-01

INTERNATIONAL STANDARD

Multimedia systems – Guide to the recommended characteristics of analogue interfaces to achieve interoperability

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 33.160.01, 35.200 ISBN 978-2-8322-5056-3

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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MULTIMEDIA SYSTEMS – GUIDE TO THE RECOMMENDED CHARACTERISTICS OF ANALOGUE INTERFACES TO ACHIEVE INTEROPERABILITY

FOREWORD

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International Standard IEC 61938 has been prepared by IEC technical committee 100: Audio, video and multimedia systems and equipment.

This third edition cancels and replaces the second edition published in 2013. This edition constitutes a technical revision.

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

a) electric tolerance is standardized;
b) recommended value of output source impedance is adjusted;
c) value of 6 Ω is additionally recommended to impedance-defined loudspeaker systems;
d) values in each table are chosen with respect to the state of the art and representative of best practice in industry.

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

CDV	Report on voting
100/2879/CDV	100/2996/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://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.

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

The first edition of IEC 61938 was derived from IEC 60268-15, IEC 60574-4 and IEC 60933-1 and also from related proposals which had been submitted up until the date of this revision. IEC 60268-15 was the first standard to address 'interoperability' – the ability of equipment from different manufacturers to be assembled into a system with full compatibility at every 'interface'. The aim of the previous revision was to make the intention of this document easily comprehensible by using widely used terminology in the title and text of the document. The purpose of this revision is to expand the measurement frequency range in step with the progress of recent equipment.

The features of the revision are the following:

a) unification and arrangement of existing related standards, including effective proposals which have been submitted;

b) extension of the measurement frequency range.

NOTE The standard numbers mentioned above correspond to the revised numbers, if applicable.

MULTIMEDIA SYSTEMS – GUIDE TO THE RECOMMENDED CHARACTERISTICS OF ANALOGUE INTERFACES TO ACHIEVE INTEROPERABILITY

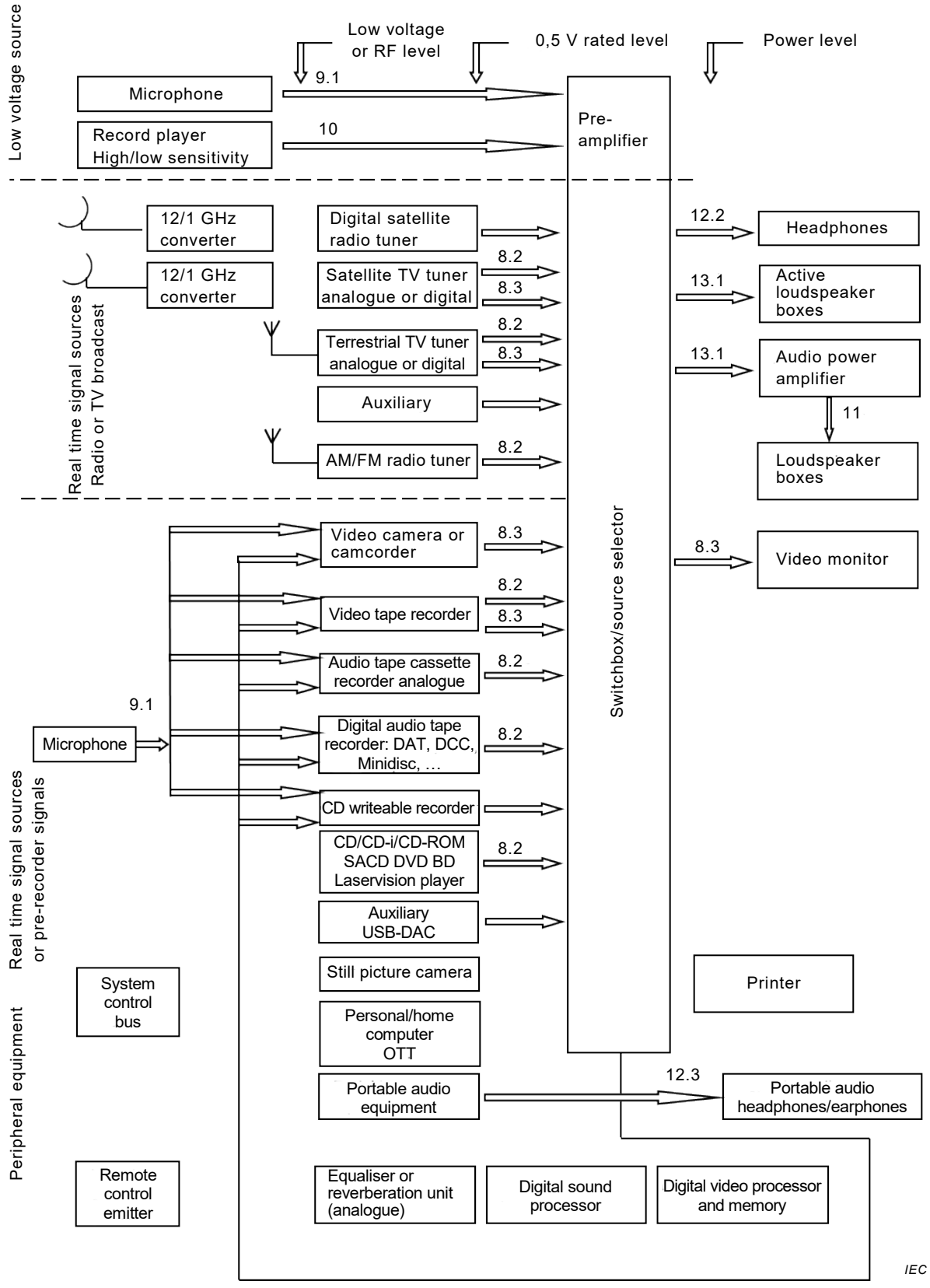
1 Scope

This document gives guidance on current practice for the characteristics of multimedia analogue interfaces to achieve interoperability between equipment from different manufacturers. It is not a performance standard.

Recommendations for interfaces for equipment used in vehicles, and for analogue video interfaces for broadcast and similar equipment, are not given.

Refer to IEC 60958 for the interconnection of digital signals.

Figure 1 shows in a diagram the possible interfaces of the audio and video sources and destinations.



NOTE The numbers indicated above the arrows refer to the appropriate clause or subclauses of this document.

Figure 1 – Audio and video sources and destinations

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 60038, *IEC standard voltages*

IEC 60094-2, *Magnetic tape recording and reproducing systems – Part 2: Calibration tapes*

IEC 60268-1, *Sound system equipment – Part 1: General*

IEC 60268-3, *Sound system equipment – Part 3: Amplifiers*

IEC 60268-5, *Sound system equipment – Part 5: Loudspeakers*

IEC 60268-7:2010, *Sound system equipment – Part 7: Headphones and earphones*

IEC 60268-11:1987, *Sound system equipment – Part 11: Application of connectors for the interconnection of sound system components*

IEC 60268-11:1987/AMD1:1989, *Sound system equipment – Part 11: Application of connectors for the interconnection of sound system components*

IEC 60268-11:1987/AMD2:1991, *Sound system equipment – Part 11: Application of connectors for the interconnection of sound system components*

IEC 60268-12, *Sound system equipment – Part 12: Application of connectors for broadcast and similar use*

IEC 60603-11:1992, *Connectors for frequencies below 3 MHz for use with printed boards – Part 11: Detail specification for concentric connectors (dimensions for free connectors and fixed connectors)*

IEC 60958:2016, *Digital audio interface – ALL PARTS*

ITU-R BT.1700:2005, *Characteristics of composite video signals for conventional analogue television systems*