

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

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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.

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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

## 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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-02-16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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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	-	-

## CONTENTS

FOREWORD.....	5
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references .....	10
3 Terms and definitions .....	10
4 General conditions.....	13
5 Power supply.....	13
5.1 Alternating current (AC) power supply voltages and frequencies .....	13
5.2 Direct current (DC) power supply voltages.....	14
5.3 Power supply feed for microphones.....	14
6 Interconnections .....	14
6.1 Connections.....	14
6.1.1 General .....	14
6.1.2 Characteristics of cables .....	14
6.2 Connectors .....	16
7 Marking and symbols for marking .....	16
7.1 Marking.....	16
7.2 Symbols for marking .....	16
8 Electrical recommended values.....	16
8.1 General purpose output/input .....	16
8.2 General purpose audio output/input.....	16
8.2.1 Audio-only interfaces for consumer equipment.....	16
8.2.2 Interfaces for professional equipment and consumer equipment where audio and video signals are present on the same connector or cable.....	17
8.3 General purpose video input/output .....	19
9 Interoperability of microphones and amplifiers .....	19
9.1 Microphones (excluding piezoelectric types).....	19
9.2 Power supply feed for electret microphones fed over a signal conductor ("plug-in power") .....	20
9.3 Power supply feed for electret microphones fed by a separate conductor ("soundcard power" or "PC power") .....	21
9.4 Phantom supply system .....	21
9.4.1 General .....	21
9.4.2 Supply voltage polarity .....	21
9.4.3 Circuit diagram .....	22
9.4.4 Value of the supply voltage .....	22
9.4.5 Supply current .....	22
9.4.6 Marking .....	22
9.5 A-B supply system .....	23
9.5.1 General .....	23
9.5.2 Output impedance of the microphone .....	23
9.5.3 Circuit diagram .....	23
9.5.4 Connection of the power supply to earth .....	23
9.5.5 Marking .....	23
9.6 Polarity of the audio frequency voltage.....	23
10 Interoperability of record-playing units (pick-ups) and amplifiers .....	25

11	Interoperability of loudspeakers and amplifiers .....	26
11.1	Single unit loudspeakers.....	26
11.2	Loudspeaker systems .....	26
11.2.1	Loudspeakers with built-in amplifier .....	26
11.2.2	Impedance-defined loudspeaker systems .....	26
11.2.3	Constant voltage loudspeaker systems.....	27
11.3	Voltage (or power) interoperability of amplifiers and loudspeakers .....	27
11.3.1	Overview .....	27
11.3.2	Interoperability requirements .....	27
11.4	Polarity of the sound pressure .....	28
12	Interoperability of headphones and amplifiers .....	28
12.1	General.....	28
12.2	Interoperability of headphones with stationary amplifiers .....	28
12.3	Interoperability of portable audio headphones/earphones and portable audio equipment.....	29
12.3.1	General .....	29
12.3.2	Portable audio headphones/earphones .....	29
12.3.3	Portable audio equipment.....	29
12.3.4	Recommended values and input/output values for portable audio headphones/earphones and portable audio equipment .....	29
13	Interoperability of amplifiers with other amplifiers.....	30
13.1	Pre-amplifiers and power amplifiers for general purpose and sound reinforcement.....	30
13.2	Broadcast and similar line amplifiers.....	31
	Annex A (informative) Pairing and screening of conductors.....	32
	Annex B (informative) Phantom power variants for specialized applications.....	33
	Bibliography.....	34
	Figure 1 – Audio and video sources and destinations .....	9
	Figure 2 – Example of plug-in power system for a single microphone.....	23
	Figure 3 – Example of plug-in power system for a two-channel microphone.....	24
	Figure 4 – Example of soundcard power system.....	24
	Figure 5 – Example of phantom power supply system .....	24
	Figure 6 – Example of A-B power supply system .....	25
	Figure B.1 – Caution symbol.....	33
	Table 1 – Direct current (DC) power supply voltages and tolerances.....	14
	Table 2 – General purpose values for audio-only interfaces .....	16
	Table 3 – General purpose values for audio signals for professional interfaces.....	18
	Table 4 – General purpose recommended values for video signals .....	19
	Table 5 – Recommended values for microphones and amplifiers.....	20
	Table 6 – Required values for phantom supply systems .....	25
	Table 7 – Required values for A-B power supply systems .....	25
	Table 8 – Recommended values for analogue record-playing units and amplifiers.....	25
	Table 9 – Recommended values for impedance-defined loudspeaker systems .....	26
	Table 10 – Recommended values for constant voltage loudspeaker systems .....	27

Table 11 – Recommended values for headphones and amplifiers in stationary applications .....	28
Table 12 – Recommended values for portable audio headphones/earphones and portable audio equipment .....	29
Table 13 – Recommended values for pre-amplifiers and power amplifiers .....	31
Table 14 – Recommended values for broadcast and similar line amplifiers .....	31

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## 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.

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

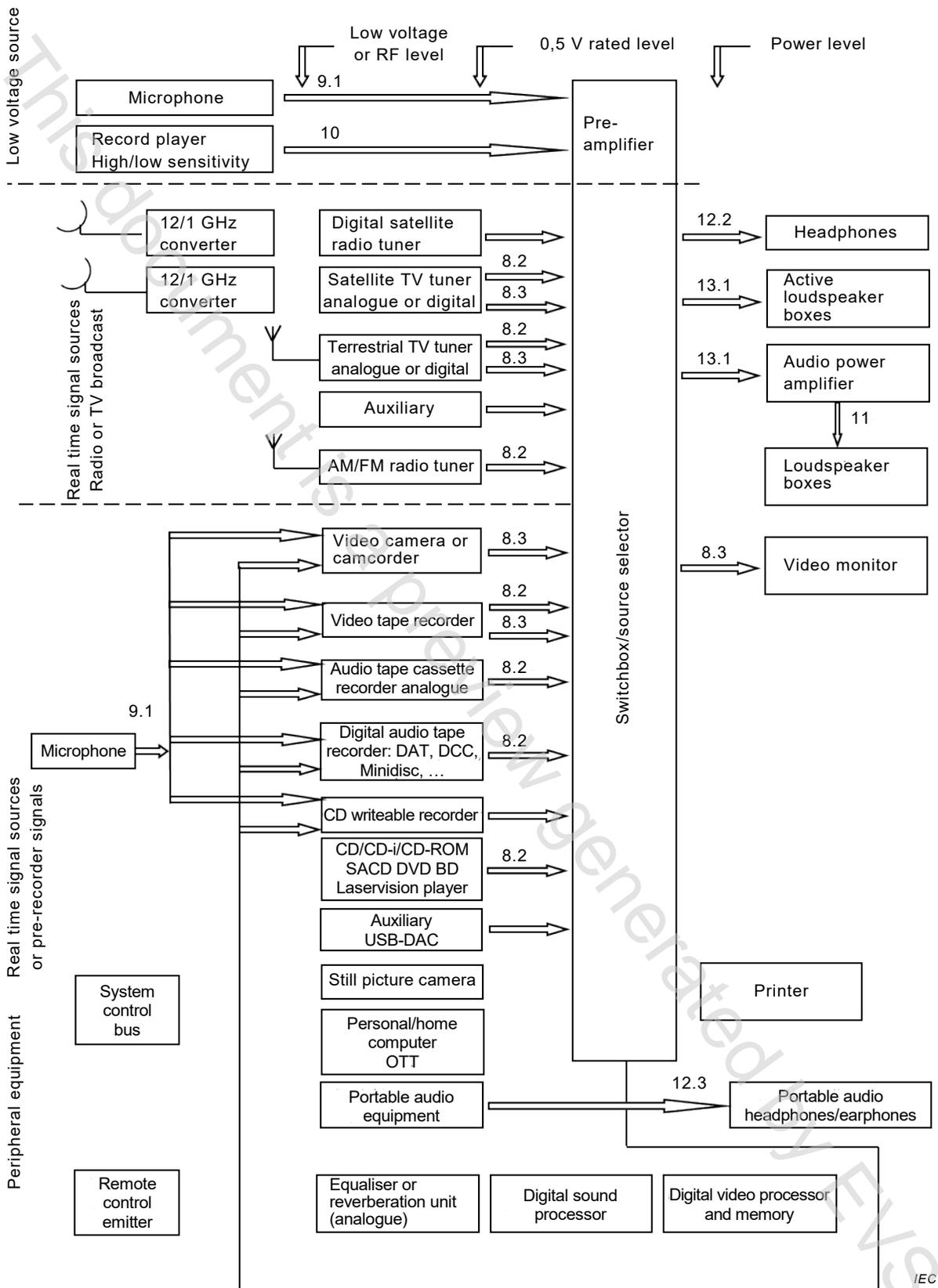
### 1 Scope

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