



SLOVENSKI STANDARD
SIST EN 60268-4:2001
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Sound system equipment - Part 4: Microphones (IEC 60268-4:1997)

Sound system equipment -- Part 4: Microphones

Elektroakustische Geräte -- Teil 4: Mikrofone

Equipements pour systèmes électroacoustiques -- Partie 4: Microphones

Ta slovenski standard je istoveten z: EN 60268-4:1999

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60268-4

September 1999

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**Sound system equipment
Part 4: Microphones
(IEC 60268-4:1997)**

Equipements pour systèmes
électroacoustiques
Partie 4: Microphones
(CEI 60268-4:1997)

Elektroakustische Geräte
Teil 4: Mikrofone
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CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the International Standard IEC 60268-4:1997, prepared by SC 100C, Audio, video and multimedia subsystems and equipment, of IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the formal vote and was approved by CENELEC as EN 60268-4 on 1999-08-01 without any modification.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2000-08-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2002-08-01

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annexes A and ZA are normative and annexes B and C are informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60268-4:1997 was approved by CENELEC as a European Standard without any modification.

In the official version, for annex C, Bibliography, the following notes have to be added for the standards indicated:

- IEC 60574-1 NOTE: Harmonized as HD 369.1 S1:1978 (not modified).
- IEC 60651 NOTE: Harmonized as EN 60651:1994 (not modified).

Annex ZA (normative)

Normative references to international publications
with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60065 (mod)	1985	Safety requirements for mains operated electronic and related apparatus for household and similar general use	EN 60065 ¹⁾ + corr. June	1993 1999
IEC 60268-1	1985	Sound system equipment Part 1: General	HD 483.1 S2 ²⁾	1989
IEC 60268-2	1987	Part 2: Explanation of general terms and calculation methods	HD 483.2 S2 ³⁾	1993
IEC 60268-3	1988	Part 3: Amplifiers	HD 483.3 S2 ⁴⁾	1992
IEC 60268-5	1989	Part 5: Loudspeakers	EN 60268-5 ⁵⁾	1996
IEC 60268-11	1987	Part 11: Application of connectors for the interconnection of sound system components	HD 483.11 S3 ⁶⁾	1993
IEC 60268-12	1987	Part 12: Application of connectors for broadcast and similar use	EN 60268-12 ⁷⁾	1995
IEC 60268-15	1987	Part 15: Preferred matching values for the interconnection of sound system components	HD 483.15 S4 ⁸⁾	1992

1) EN 60065 is superseded by EN 60065:1998, which is based on IEC 60065:1998, mod.

2) HD 483.1 S2 includes A1:1988 to IEC 60268-1.

3) HD 483.2 S2 includes A1:1991 to IEC 60268-2.

4) HD 483.3 S2 includes A1:1990 + A2:1991 to IEC 60268-3.

5) EN 60268-5 includes A1:1993 to IEC 60268-5.

6) HD 483.11 S3 includes A1:1989 + A2:1991 to IEC 60268-11.

7) EN 60268-12 includes A1:1991 to IEC 60268-12.

8) HD 483.15 S4 includes A1:1989 + A2:1990 + A3:1991 to IEC 60268-15.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60574-3	1983	Audiovisual, video and television equipment and systems Part 3: Connectors for the interconnection of equipment in audio-visual systems	HD 369.3 S1	1986
IEC 60581-5	1981	High fidelity audio equipment and systems Minimum performance requirements Part 5: Microphones	-	-
IEC 60651	1979	Sound level meters	EN 60651	1994
IEC 60801-2	1991	Electromagnetic compatibility for industrial-process measurement and control equipment Part 2: Electrostatic discharge requirements	EN 60801-2	1993
IEC 60914	1988	Conference systems - Electrical and audio requirements	HD 549 S1	1989
IEC 61000-4-3 (mod)	1995	Electromagnetic compatibility (EMC) Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	1996
IEC 61094-2	1992	Measurement microphones Part 2: Primary method for pressure calibration of laboratory standard microphones by the reciprocity technique	EN 61094-2	1993
IEC 61265	1995	Electroacoustics - Instruments for measurement of aircraft noise - Performance requirements for systems to measure one-third-octave band sound pressure levels in noise certification of transport-category aeroplanes	EN 61265	1995
CISPR 20 ⁹⁾	1990	Limits and methods of measurement of immunity characteristics of sound and television broadcast receivers and associated equipment	-	-
ISO 354	1985	Acoustics - Measurement of sound absorption in a reverberation room	EN ISO 354	1993
ITU-T Recommendation P.51	1996	Artificial mouth	-	-

9) Instead of CISPR 20:1990, EN 55020:1994 + corr. December 1997 + A11:1996, *Electromagnetic immunity of broadcast receivers and associated equipment*, applies.

**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

60268-4

Deuxième édition
Second edition
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**Equipements pour systèmes
électroacoustiques –**

**Partie 4:
Microphones**

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Microphones [standards/sist/0091a434-cbd7-4710-84a9-a2c35a401de6/sist-en-60268-4-2001](https://standards.sist/0091a434-cbd7-4710-84a9-a2c35a401de6/sist-en-60268-4-2001)

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SOUND SYSTEM EQUIPMENT –
Part 4: Microphones**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
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- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60268-4 has been prepared by subcommittee 100C: Equipment and systems in the field of audio, video and audiovisual engineering, of IEC Technical Committee 100: Audio, video and multimedia systems and equipment.

This second edition cancels and replaces the first edition published in 1972, and constitutes a technical revision.

The text of this standard is based on the following documents:

FDIS	Report on voting
100C/53/FDIS	100C/127/RVD

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

Annex A forms an integral part of this standard.

Annexes B and C are for information only.

INTRODUCTION

This part of IEC 60268 gives recommendations relative to the characteristics to be specified and the methods of measurement for sound system microphones.

Measuring methods are specified for the electrical impedance, sensitivity, directional response pattern, dynamic range and external influences.

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SOUND SYSTEM EQUIPMENT – Part 4: Microphones

1 Scope

This part of IEC 60268 applies to sound system microphones for all applications for speech and music. They do not apply to measurement microphones.

The microphones shall be understood to include devices, if any, such as transformers, pre-amplifiers, or other elements which form an integral part of the microphone, up to the output terminals specified by the manufacturer.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60268. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 60268 are encouraged to investigate the possibility of applying the most recent editions of the normative documents listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 600065: 1985, *Safety requirements for mains operated electronic and related apparatus for household and similar general use*

IEC 60268-1: 1985, *Sound system equipment – Part 1: General*

IEC 60268-2: 1987, *Sound system equipment – Part 2: Explanation of general terms and calculation methods*

IEC 60268-3: 1988, *Sound system equipment – Part 3: Amplifiers*

IEC 60268-5: 1989, *Sound system equipment – Part 5: Loudspeakers*

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

IEC 60268-12: 1987, *Sound system equipment – Part 12: Application of connectors for broadcast and similar use*

IEC 60268-15: 1987, *Sound system equipment – Part 15: Preferred matching values for the interconnection of sound system components*

IEC 60574-3: 1983, *Audiovisual, video and television equipment and system – Part 3: Connectors for the interconnection of equipment in audiovisual systems*

IEC 60581-5: 1981, *High fidelity audio equipment and systems – Minimum performance requirements – Part 5: Microphones*

IEC 60651: 1979, *Sound level meters*

IEC 60801-2: 1991, *Electromagnetic compatibility for industrial-process measurement and control equipment – Part 2: Electrostatic discharge requirements*

IEC 60914: 1988, *Conference systems – Electrical and audio requirements*

IEC 61000-4-3: 1995, *Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques – Section 3: Radiated, radio-frequency, electromagnetic field immunity test*

IEC 61094-2: 1992, *Measurement microphones – Part 2: Primary method for pressure calibration of laboratory standard microphones by the reciprocity technique*

IEC 61265: 1995, *Electroacoustics – Instruments for measurement of aircraft noise – Performance requirements for systems to measure one-third-octave-band sound pressure levels in noise certification of transport-category aeroplanes*