### BS EN 60268-4:2014



## **BSI Standards Publication**

# Sound system equipment

Part 4: Microphones



BS EN 60268-4:2014 BRITISH STANDARD

#### **National foreword**

This British Standard is the UK implementation of EN 60268-4:2014. It is identical to IEC 60268-4:2014. It supersedes BS EN 60268-4:2010 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/100, Audio, video and multimedia systems and equipment.

A list of organizations represented on this committee can be obtained on request to its secretary.

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#### **Foreword**

The text of document 100/2116/CDV, future edition 5 of IEC 60268-4, 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 60268-4:2014.

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•	standard or by endorsement latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2017-07-24

This document supersedes EN 60268-4:2010.

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

CISPR 22	NOTE	Harmonized as EN 55022.
IEC 60065:2001	NOTE	Harmonized as EN 60065:2002.
IEC 60065/A1:2005	NOTE	Harmonized as EN 60065/A1:2006.
IEC 60065/A2:2010	NOTE	Harmonized as EN 60065/A2:2010.
IEC 60958-4	NOTE	Harmonized as EN 60958-4.
IEC 61000-3-2	NOTE	Harmonized as EN 61000-3-2.
IEC 61000-3-3	NOTE	Harmonized as EN 61000-3-3.
IEC 61606 (Series)	NOTE	Harmonized as EN 61606 (Series).
IEC 61672-1	NOTE	Harmonized as EN 61672-1.

#### **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.				
<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60268-1	1985	Sound system equipment Part 1: General	HD 483.1 S2	1989
+A1	1988	,	-	_
+A2	1988		_	_
IEC 60268-2	1987	Sound system equipment Part 2:	HD 483.2 S2	1993
ILO 00200-2	1307	Explanation of general terms and calculation		1990
			1	
	1001	methods		
+A1	1991		-	-
IEC 60268-3	2013	Sound system equipment Part 3:	EN 60268-3	2013
		Amplifiers (GMT)		
IEC 60268-5	2003	Sound system equipment Part 5:	EN 60268-5	2003
		Loudspeakers		
+A1	2007	•	+A1	2009
IEC 60268-11	1987	Sound system equipment Part 11:	HD 483.11 S3	1993
.20 00200 11		Application of connectors for the	115 100.11 00	.000
		interconnection of sound system		
	4000	components		
+A1	1989		-	-
+A2	1991		-	-
IEC 60268-12	1987	Sound system equipment Part 12:	EN 60268-12	1995
		Application of connectors for broadcast and		
		similar use		
+A1	1991		-	_
+A2	1994		+A2	1995
IEC 61000-4-2	2008	Electromagnetic compatibility (EMC) Part	FN 61000-4-2	2009
.200.000 . 2	_000	4-2: Testing and measurement techniques -	2.10.000 . 2	
		Electrostatic discharge immunity test		
IEC 61000 4 2	2006		EN 64000 4 2	2006
IEC 61000-4-3	2006	Electromagnetic compatibility (EMC) Part	EN 61000-4-3	2006
		4-3: Testing and measurement techniques -		
		Radiated, radio-frequency, electromagnetic		
		field immunity test		
IEC 61000-4-4	2012	Electromagnetic compatibility (EMC) Part	EN 61000-4-4	2012
		4-4: Testing and measurement techniques -		
		Electrical fast transient/burst immunity test		
IEC 61000-4-6	2008	Electromagnetic compatibility (EMC) Part	EN 61000-4-6	2009
		4-6: Testing and measurement techniques -		
		Immunity to conducted disturbances,		
		induced by radio-frequency fields		
IEC 64000 4.0	2000		EN 64000 4 0	2010
IEC 61000-4-8	2009	Electromagnetic compatibility (EMC) Part	EN 01000-4-8	2010
		4-8: Testing and measurement techniques -		
		Power frequency magnetic field immunity		
		test		

IEC 61000-4-16	-	Electromagnetic compatibility (EMC) - Part 4-16: Testing and measurement techniques - Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz	-	-
IEC 61000-4-17	1999	Electromagnetic compatibility (EMC) - Part 4-17: Testing and measurement techniques - Ripple on d.c. input power port immunity test	-	-
+A1	2001		+A1	2004
+A2	2008		+A2	2009
IEC 61260-1	2014	Electroacoustics - Octave-band and fractional-octave-band filters Part 1: Specifications	EN 61260-1	2014
IEC 61938	2013	Multimedia systems - Guide to the recommended characteristics of analogue interfaces to achieve interoperability	EN 61938	2013
CISPR 35	-	Electromagnetic compatibility of multimedia equipment - Immunity requirements	-	-
ITU-T Recommendation P.51	1996	Artificial mouth	-	-
EN 55103-2	2009	Electromagnetic compatibility – Product family standard for audio, video, audio-visua and entertainment lighting control apparatus for professional use – Part 2: Immunity	- I	-
EN 300 422-2 V1.3.	12011	Electromagnetic compatibility and radio spectrum matters (ERM) – Wireless microphones in the 25 MHz to 3 GHz frequency range – Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive	-	-

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#### **SOUND SYSTEM EQUIPMENT -**

#### Part 4: Microphones

#### 1 Scope

This part of IEC 60268 specifies methods of measurement for the electrical impedance, sensitivity, directional response pattern, dynamic range and external influences of sound system microphones, and also details the characteristics to be specified by the manufacturer.

It applies to sound system microphones for all applications for speech and music. It does not apply to measurement microphones, but it does apply to each audio channel of microphones having more than one channel, for example for stereo or similar use. It is also applicable to flush-mounted microphones and to the analogue characteristics of microphones with digital audio output.

For the purposes of this International Standard, a microphone includes all such devices as transformers, pre-amplifiers, or other elements that form an integral part of the microphone, up to the output terminals specified by the manufacturer.

The major characteristics of a microphone are considered in Clauses 6 to 21. Additional characteristics are considered in Annex A, Annex C and Annex D.

NOTE The characteristics specified in this standard do not completely describe the subjective response of the microphone. Further work is necessary to find new definitions and measurement procedures for a later replacement by objective characteristics of at least some of the subjective descriptions used to describe microphone performance.

#### 2 Normative references

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.

CISPR 35:-, Electromagnetic compatibility of multimedia equipment – Immunity requirements<sup>1</sup>

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

Amendment 1:1988 Amendment 2:1988

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

Amendment 1:1991

IEC 60268-3:2013, Sound system equipment – Part 3: Amplifiers

IEC 60268-5:2003, Sound system equipment – Part 5: Loudspeakers

Amendment 1:2007 Amendment 1:2007

<sup>1</sup> To be published.