



NSAI
Standards

Irish Standard
I.S. EN 60318-1:2009

Electroacoustics - Simulators of human head and ear -- Part 1: Ear simulator for the measurement of supra-aural and circumaural earphones (IEC 60318-1:2009 (EQV))

I.S. EN 60318-1:2009

Incorporating amendments/corrigenda issued since publication:

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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EUROPEAN STANDARD
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EUROPÄISCHE NORM

EN 60318-1

December 2009

ICS 17.140.50

Supersedes EN 60318-1:1998, EN 60318-2:1998

English version

**Electroacoustics -
Simulators of human head and ear -
Part 1: Ear simulator for the measurement of supra-aural
and circumaural earphones
(IEC 60318-1:2009)**

Electroacoustique -
Simulateurs de tête et d'oreille humaines -
Partie 1: Simulateur d'oreille
pour la mesure des écouteurs
supra-auraux et circumauraux
(CEI 60318-1:2009)

Akustik -
Simulatoren des menschlichen Kopfes
und Ohres -
Teil 1: Ohrsimulator zur Kalibrierung
von supra-auralen und circumauralen
Kopfhörern
(IEC 60318-1:2009)

This European Standard was approved by CENELEC on 2009-11-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

I.S. EN 60318-1:2010

EN 60318-1:2009

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Foreword

The text of document 29/683/FDIS, future edition 2 of IEC 60318-1, prepared by IEC TC 29, Electroacoustics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60318-1 on 2009-11-01.

This European Standard supersedes EN 60318-1:1998 and EN 60318-2:1998.

This European Standard includes the following significant technical changes with respect to EN 60318-1:1998:

- an extension of the frequency range to 16 kHz;
- a revised specification for the acoustical transfer impedance, including tolerances;
- a method for measuring the acoustical transfer impedance;
- expanded measurement uncertainties.

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) 2010-08-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2012-11-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60318-1:2009 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 61094-1	NOTE	Harmonized as EN 61094-1:2000 (not modified).
IEC 61094-2	NOTE	Harmonized as EN 61094-2:2009 (not modified).
IEC 61094-6	NOTE	Harmonized as EN 61094-6:2005 (not modified).
ISO 389-1	NOTE	Harmonized as EN ISO 389-1:2000 (not modified).
ISO 389-5	NOTE	Harmonized as EN ISO 389-5:2005 (not modified).
ISO 389-8	NOTE	Harmonized as EN ISO 389-8:2004 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 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 61094-4	- ¹⁾	Measurement microphones - Part 4: Specifications for working standard microphones	EN 61094-4	1995 ²⁾
ISO/IEC Guide 98-3	- ¹⁾	Uncertainty of measurement - Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)	-	-

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROACOUSTICS – SIMULATORS OF HUMAN HEAD AND EAR –

Part 1: Ear simulator for the measurement of supra-aural and circumaural earphones

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60318-1 has been prepared by IEC technical committee 29: Electroacoustics.

This second edition cancels and replaces the first edition published in 1998 as well as replacing IEC 60318-2, published in 1998. It constitutes a technical revision.

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

- an extension of the frequency range to 16 kHz;
- a revised specification for the acoustical transfer impedance, including tolerances;
- a method for measuring the acoustical transfer impedance;
- expanded measurement uncertainties.

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

FDIS	Report on voting
29/683/FDIS	29/698/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.

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

A list of all parts of IEC 60318 series, under the general title *Electroacoustics – Simulators of human head and ear*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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- withdrawn;
- replaced by a revised edition; or
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