

**Audio and audiovisual equipment -
Digital audio parts - Basic measurement
methods of audio characteristics -- Part
4: Personal computer**

Audio and audiovisual equipment - Digital audio
parts - Basic measurement methods of audio
characteristics -- Part 4: Personal computer

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 61606-4:2007 sisaldab Euroopa standardi EN 61606-4:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 17.01.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 61606-4:2007 consists of the English text of the European standard EN 61606-4:2006.</p> <p>This document is endorsed on 17.01.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This part of IEC 61606 specifies the basic measurement methods of a linear PCM signal for an audio part of personal computers (PCs) and applies to both desktop and portable computers. The common measuring conditions and methods are described in IEC 61606-1. Specific conditions and methods of measurement for PCs are given in this standard.</p>	<p>Scope:</p> <p>This part of IEC 61606 specifies the basic measurement methods of a linear PCM signal for an audio part of personal computers (PCs) and applies to both desktop and portable computers. The common measuring conditions and methods are described in IEC 61606-1. Specific conditions and methods of measurement for PCs are given in this standard.</p>
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ICS 33.160.30, 35.020

Võtmesõnad:

**Audio and audiovisual equipment -
Digital audio parts -
Basic measurement methods of audio characteristics
Part 4: Personal computer
(IEC 61606-4:2005)**

Equipements audio et audiovisuels -
Parties audionumériques -
Méthodes fondamentales pour
la mesure des caractéristiques audio
Partie 4: Ordinateur personnel
(CEI 61606-4:2005)

Audio- und Audiovisuelle Geräte -
Digitale Tonteile -
Grundlegende Messverfahren der
Audio-Eigenschaften
Teil 4: Personal-Computer
(IEC 61606-4:2005)

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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 61606-4:2005, prepared by IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the formal vote and was approved by CENELEC as EN 61606-4 on 2006-12-01 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) 2007-12-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2009-12-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61606-4:2005 was approved by CENELEC as a European Standard without any modification.

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 60038 (mod)	- ¹⁾	IEC standard voltages ²⁾	HD 472 S1 + corr. February + A11	1989 ³⁾ 2002 1995
IEC 60268-2	- ¹⁾	Sound system equipment Part 2: Explanation of general terms and calculation methods	HD 483.2 S2	1993 ³⁾
IEC 61606-1	- ¹⁾	Audio and audiovisual equipment - Digital audio parts - Basic measurement methods of audio characteristics Part 1: General	EN 61606-1	2004 ³⁾
IEC 61606-2	- ¹⁾	Audio and audiovisual equipment - Digital audio parts - Basic measurement methods of audio characteristics Part 2: Consumer use	EN 61606-2	2004 ³⁾
IEC 61672-1	- ¹⁾	Electroacoustics - Sound level meters Part 1: Specifications	EN 61672-1	2003 ³⁾

¹⁾ Undated reference.

²⁾ The title of HD 472 S1 is: Nominal voltages for low voltage public electricity supply systems.

³⁾ Valid edition at date of issue.

INTERNATIONAL STANDARD

IEC
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**Audio and audiovisual equipment –
Digital audio parts – Basic measurement
methods of audio characteristics –**

**Part 4:
Personal computer**



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As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

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Audio and audiovisual equipment – Digital audio parts – Basic measurement methods of audio characteristics –

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

AUDIO AND AUDIOVISUAL EQUIPMENT – DIGITAL AUDIO PARTS – BASIC MEASUREMENT METHODS OF AUDIO CHARACTERISTICS –

Part 4: Personal computer

FOREWORD

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International Standard IEC 61606-4 has been prepared by IEC technical committee 100: Audio, video and multimedia equipment and systems.

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

CDV	Report on voting
100/952/CDV	100/1030/RVC

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.

IEC 61606 consists of the following parts under the general title *Audio and audiovisual equipment – Digital audio parts – Basic measurement methods of audio characteristics*:

Part 1: General

Part 2: Consumer use

Part 3: Professional use¹

Part 4: Personal computer

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

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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

¹ Under consideration.

AUDIO AND AUDIOVISUAL EQUIPMENT – DIGITAL AUDIO PARTS – BASIC MEASUREMENT METHODS OF AUDIO CHARACTERISTICS –

Part 4: Personal computer

1 Scope

This part of IEC 61606 specifies the basic measurement methods of a linear PCM signal for an audio part of personal computers (PCs) and applies to both desktop and portable computers. The common measuring conditions and methods are described in IEC 61606-1. Specific conditions and methods of measurement for PCs are given in this standard.

NOTE 1 The methods described are mostly based on sampling frequencies from 8 kHz to 192 kHz and bit length from 8 bit to 24 bit.

NOTE 2 This standard describes tests for equipment which has digital input with analogue output and analogue input with digital output. Digital input data are provided from an internal HDD or other memory media and output digital data are recorded to an internal HDD or main memories.

NOTE 3 The methods specified in this standard are not applicable to systems incorporating bit-rate reduced digital audio signals that have data loss or to 1-bit signals. This part does not apply to analogue input with analogue output and digital input with digital output as described in IEC 61606-1.

NOTE 4 When a CPU in a PC is overloaded by tasks other than those for audio input/output, the PC may fail to record/reproduce the whole audio data. This standard applies only to the measurement in which input/output data are recorded/reproduced without such missing data. The performance of a PC with missing audio data may be evaluated by the short-term distortion measurement although such evaluation is not within the scope of this standard.

2 Normative references

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.

IEC 60038, *IEC standard voltages*

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

IEC 61606-1, *Audio and audiovisual equipment – Digital audio parts – Basic measurement methods of audio characteristics – Part 1: General*

IEC 61606-2, *Audio and audiovisual equipment – Digital audio parts – Basic measurement methods of audio characteristics – Part 2: Consumer use*

IEC 61672-1, *Electroacoustics – Sound level meters – Part 1: Specifications*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 61606-1, as well as the following, apply.