INTERNATIONAL STANDARD

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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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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 4: Personal computer

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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 use[1]

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- withdrawn;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.

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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*