

# TECHNICAL SPECIFICATION

**Guideline for synchronization of audio and video –  
Part 1-1: Measurement methods for synchronization of audio and video  
equipment and systems – General**

Withdrawn



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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland  
Email: [inmail@iec.ch](mailto:inmail@iec.ch)  
Web: [www.iec.ch](http://www.iec.ch)

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Email: [csc@iec.ch](mailto:csc@iec.ch)  
Tel.: +41 22 919 02 11  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## GUIDELINE FOR SYNCHRONIZATION OF AUDIO AND VIDEO –

**Part 1-1: Measurement methods for synchronization  
of audio and video equipment and systems –  
General**

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Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC 62312-1-1, which is a technical specification, has been prepared by IEC technical committee 100: Audio, video and multimedia systems and equipment.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
100/1270/DTS	100/1316/RVC

Full information on the voting for the approval of this technical specification 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.

The list of all the parts of IEC 62312, under the general title *Guideline for synchronization of audio and video*, 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

- transformed into an International standard,
- 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- withdrawn,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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## INTRODUCTION

Audio and video equipment processes or reproduces the input signals of audio and video, then outputs these signals in various forms. Audio and video equipment needs time to process or reproduce the input signal. This time depends on the signal format, the architecture of equipment and the design of equipment. Hence audio and video equipment may have different output delays for audio and video signals, and this causes unsynchronised audio and video outputs.

This Technical Specification is the general part of the measurement method for that time difference between audio and video outputs. The other subparts of IEC/TS 62312-1 describe specific measurement methods for specific audio and video equipment.

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## GUIDELINE FOR SYNCHRONIZATION OF AUDIO AND VIDEO –

### Part 1-1: Measurement methods for synchronization of audio and video equipment and systems – General

#### 1 Scope

This part of 62312 gives guidelines for methods of synchronization of audio and video.

This Technical Specification describes general measurement methods for the synchronization of audio and video equipment.

#### 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/TS 62312-2, *Guideline for synchronization of audio and video – Part 2: Methods for synchronization of audio and video systems*

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply. Also the terms and definitions given in IEC 62312-2 apply.

##### 3.1 EUT

equipment under test

#### 4 Measuring conditions

##### 4.1 General conditions

##### 4.1.1 Power supplies

##### 4.1.1.1 Voltage

The supplied AC power voltage shall be the fixed value of the region where the equipment under test is used. The supplied DC power voltage shall be the fixed value specified by the manufacturer. The tolerance shall be within  $\pm 1\%$  in both cases. If this tolerance does not affect the results of measurement, the tolerance can be within  $\pm 5\%$ .

##### 4.1.1.2 Frequency

The frequency of the AC power supply shall be 50 Hz or 60 Hz and the fluctuation shall be within  $\pm 2\%$ .