# IEC TS 62312-1-1

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# REDLINE VERSION

colour inside

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

INTERNATIONAL
ELECTROTECHNICAL
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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

## FOREWORD

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**This Redline version provides you with a quick and easy way to compare all the changes between this standard and its previous edition. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.**

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- the required support cannot be obtained for the publication of an International Standard, despite repeated efforts, or
- the subject is still under technical development or where, for any other reason, there is the future but no immediate possibility of an agreement on an International Standard.

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

IEC TS 62312-1, which is a technical specification, has been prepared by technical area 11: Quality for audio, video and multimedia systems, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This second edition cancels and replaces the first edition published in 2008. This edition constitutes a technical revision.

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

a) new Annex B informs of general measurement and test method of audio latency;

b) comments from SMPTE (including small technical issues).

The text of this Technical Specifications is based on the following documents:

| Enquiry draft | Report on voting |
|---|---|
| 100/3048/DTS | 100/3105/RVDTS |

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

The list of all the parts of IEC 62312, published 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 document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- transformed into an International standard,
- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

**IMPORTANT – The “colour inside” logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.**

# 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 the equipment and the design of the 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 parts of IEC ~~/TS~~ 62312-1 describe specific measurement methods for specific audio and video equipment.

# GUIDELINE FOR SYNCHRONIZATION OF AUDIO AND VIDEO –

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

## 1 Scope

The IEC 62312 series gives guidelines for methods of ~~synchronization of~~ synchronizing audio and video.

This part of IEC 62312-1 describes general measurement methods for the synchronization of audio and video equipment.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 62312-2:2018, *Guideline for synchronization of audio and video – Part 2: Methods for synchronization of audio and video systems*

# IEC TS 62312-1-1

Edition 2.0 2018-11

# TECHNICAL SPECIFICATION

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



IEC TS 62312-1-1:2018-11(en)

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

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