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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 44021.1-2024

**Audio, video and related equipment - Determination of power
consumption - Part 1: General**
(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting:

This document is part 1 of GB/T 44021 "Measurement of power consumption of audio, video and related equipment": GB/T 44021 has been published in Lower part:

- Part 1: General;
- Part 2: Test signals and media;
- Part 3: Television sets;
- Part 4: Video recording equipment;
- Part 5: Set-top box (STB);

--- Part 6: Audio equipment:

This document is equivalent to IEC 62087-1:2015 "Measurement of power consumption of audio, video and related equipment Part 1: General":

Introduction

As important consumer products, audio and video products are widely used in consumers' homes: The power consumption of audio and video and related equipment has become a major concern for consumers:

The development of this document provides a practical evaluation method for the power consumption evaluation of audio and video and related equipment, which will help strengthen the consumer product field:

It has played a positive role in building the domain standard system and promoting the healthy development of the industry:

GB/T 44021 "Measurement of power consumption of audio, video and related equipment" is planned to consist of 6 parts:

--- Part 1: General: The purpose is to specify general requirements for power consumption measurements of audio, video and related equipment:

--- Part 2: Test signals and media: The purpose is to give the test signals for audio, video and related equipment such as televisions and computer monitors:

Signals and media used when measuring power consumption:

--- Part 3: Television sets: The purpose is to specify the power consumption measurement and related characteristics of television sets:

--- Part 4: Video recording equipment: The purpose is to describe the power consumption measurement method of video recording equipment with removable media and give the power consumption Measurement related various operation modes:

--- Part 5: Set-top Box (STB): The purpose is to describe the power consumption measurement method of the set-top box and give various Operation mode:

--- Part 6: Audio equipment: The purpose is to describe the power consumption measurement method of audio equipment:

Power consumption measurement of audio, video and related equipment Part 1: General

1 Scope

This document specifies general requirements for the measurement of power consumption in audio, video and related equipment: Requirements for specific types of equipment are

specified in other documents:

may supersede the requirements given in this document:

Additionally, this document defines various operating modes that are relevant for power consumption measurements:

The other documents apply only to devices powered by an external power source: Devices with a non-removable main battery are not included in this document:

Any number of auxiliary batteries may be included:

This document provides an example of a verification process for using indicated values to access the compatibility of a specific model of equipment:

The measurement conditions in this document represent normal usage of the device and may differ from usage under specific conditions, such as those specified in safety standards:

The usage is different under the specified conditions:

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document:

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document:

GB/T 35758-2017 Measurement method for standby power of household appliances (IEC 62301:2011, IDT) Note: GB/Z 32582-2016 Environmental standardization of electronic and electrical products and systems Standardized terminology for environmental factors (IEC 62542 FDIS::2013, MOD)

3 Terms, definitions and abbreviations

3.1

Terms and Definitions for the purposes of this document, the terms and definitions defined in Chapter 5 of IEC 62542:2013 and the following apply:

3.1.1

Features that sense ambient brightness conditions and change display brightness accordingly may reduce power consumption:

3.1.2

Auxiliary battery an electrical storage device that is not capable of supplying power to the

primary functions of the equipment:

Note: Memory retention batteries and remote control batteries are examples of auxiliary batteries:

3.1.3

Illuminance

A measure of the total luminous flux per unit area:

Note: The unit is lux (lx):