

ICS 33.160.01
CCS M 72



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

GB/T 35784-2017

**Audio visual equipment -- Methods for the subjective
assessment of small impairments in audio systems**

视听设备 音频系统小损伤的主观评价方法

(English Translation)

Issued on: December 29, 2017

Implemented on: July 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

Table of Contents

Foreword	
1 Scope	
2 Normative references	
3 Terms and definitions	
4 Test design	
5 Audition group choice	
5.1 Expert listener	
5.2 Select the listener's standard	
5.3 Listening group size	
6 Test method	
6.1 General	
6.2 Familiar with or training phase	
6.3 Rating Stage	
7 Attributes	
7.1 Overview	
7.2 Mono system	
7.3 Two-channel stereo system	
7.4 Multi-channel stereo system	
7.5 Advanced Audio Coding System	
8 Program material	
Playback device	
9.1 Overview	
9.2 Reference Monitor Speaker	
9.3 Reference monitor headphones	
10 Listening conditions	
10.1 Overview	
10.2 Reference audiometry room	
10.3 Reference sound field conditions	
10.4 Audible sound level	
10.5 Listening Arrangements	
11 Statistical Analysis	
12 Statistical Analysis Results Report	

12.1 Overview

12.2 Absolute rank

12.3 Difference level

12.4 Significance Level and Confidence Interval

Contents of the report

Appendix A (Normative) listener's professional competence level evaluation

Appendix B (Normative) Listeners late screening statistical methods

Appendix C (Informative) Listener Guide Example

References

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses redrafted law revision using ITU-RBS.1116-3.2015 "small subjective audio system damage assessment method." this standard compared with ITU-RBS.1116-3.2015, the following structural adjustment.

--- Increasing the normative references chapter;

--- Adjusted ITU-RBS.1116-3.2015 appendix 4 "subjective evaluation. Glossary" adjusted to Chapter 3 of this standard;

--- Adjusting the suspension section in Chapter 6 of ITU-R BS.1116-3.2015 to "General";

--- Adjust the suspension section in Chapter 7 of ITU-R BS.1116-3.2015 to "Overview".

Based on the above structure adjustment, this standard from the beginning of Chapter 4, the chapter number for the ITU-RBS.1116-3.2015 reg number plus 2 composition. For example, 3.1 in the ITU-RBS.1116-3.2015 document, numbered 5.1 in this standard.

This standard compared with ITU-RBS.1116-3.2015, the technical differences are as follows.

--- Replaced ITU-R.BS1284:2003 with YD/T 2309-2011, Modification of International Documents;

--- Removed the first chapter of ITU-RBS.1116-3.2015, added the first chapter "range";

--- Increased small damage, anchor two terms.

This standard also made the following editorial changes.

--- Modify the standard name;

--- 3.10 description of the content adjusted to Note;

--- 10.4.1.1 Note adjusted to the text;

--- In accordance with the order of emergence in the standard text and Chinese standards for the preparation of rules, appendix 1, 2, 3 is modified to Appendix B, with Record A, Appendix C.

Please note that some aspects of this standard may involve patents. The issuing agencies of this standard should not bear the responsibility of identifying these patents.

This standard proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This standard by the National Audio, Video and Multimedia Systems and Equipment Standardization Technical Committee (SAC/TC242) centralized.

1 Scope

This standard specifies the subjective evaluation method of small damage to the audio system in audio-visual equipment.

This standard applies to the assessment of small damage to the audio system; its damage is small enough, without relying on the strict test conditions and appropriate the statistical analysis is not enough to detect.

Note: This standard establishes a reference for other relevant standards that may introduce additional special conditions or relaxation conditions in the appendix.

This standard does not apply to larger and easily detectable damage to the audio system, if based on this standard will consume more time and effort and draw the result is not more credible than a simple test.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

YD/T 2309-2011 Audio quality subjective test methods (ITU-R.BS1284:2003, MOD)
ITU-RBS.645 international sound program connection test signal and measurement
(Testsignalsandmeteringtobeusedonin-ternationalsoundprogrammeconnections)
Measurement of electro-acoustic parameters of ITU-RBS.708 studio monitors
(Determinationoftheelectro-acousticalprop-ertiesofstudiomonitorheadphones) ITU-R
BS.775 Multichannel stereo echo system with or without accompanying images
systemwithandwithoutaccompanyingpicture)

3 Terms and definitions

The following terms and definitions apply to this document. The relationship between some of the terms is illustrated in FIG. 1.

Small damage **small impairments** Damage caused by the audio system; the damage is small enough not to be severely limited by the test conditions and appropriate statistical analysis is insufficient

Aware 3.2 Attribute Perceptual characteristics in auditory activity according to given verbal or written rules.

Blind test A test method in which the only source of information available to the listener is motivation.

Double-blind test A blind test method in which the listener does not have any uncontrollable interaction with the audiometry.