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

GB/T 12060.4-2012

Replacing GB/T 9401-1988

**Sound system equipment -- Part 4: Methods of measurement
for microphones**

声系统设备 第4部分：传声器测量方法

(English Translation)

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Foreword

GB/T 12060 "Sound system equipment" is divided into several parts.

- Part 1. General;
- Part 2. General method of calculation and interpretation of the term;
- Part 3. audio amplifier measurement methods;
- Part 4. Methods of measurement microphones;
- Part 5. Methods for measuring performance main speaker;
- Part 6. Auxiliary passive components;
- Part 7. Headphones measurement methods;
- Part 8. AGC device;
- Part 9. Artificial reverberation, time delay and frequency shift measurement means;
- Part 10. Peak program level meters;
- Part 11. Sound system equipment connectors for the interconnection of the application;
- Part 12. Radio and with similar sound system connected applications;
- Part 13. speaker listening tests;
- Part 14. Circular and oval speaker, shape and installation dimensions;
- Part 16. the speech transmission index (STI) objective assessment of the level of speech intelligibility;
- Part 17. Standard volume tables;
- Part 18. Peak program level meters - Digital audio peak level meter.

This is Part 4 GB/T 12060 in.

Rules in this section in accordance with GB/T 1.1-2009 given draft.

This section uses the translation method identical with IEC 60268-4:2004 "Sound system equipment - Part 4. microphone." this Part replaces GB/T 9401-1988 "method of measuring microphones." for ease of use, this section made the following editorial changes.

- a) instead of as a decimal by decimal comma ",", ".,";
- b) Remove the preface to international standards.

Compared to major changes in this part of GB/T 9401-1988 as follows.

- a) Chapter 12, an increase of 12.5 specific features stereo microphone;

- b) increase the amplitude of nonlinear Chapter 13;
- c) increasing the balance Chapter 15;
- d) Chapter 18, an increase of 18.5 instantaneous equivalent sound "spout sound" effect caused by pressure; 18.6 electromagnetic interference caused by the equivalent sound Pressure; 18.7 electrostatic discharge;
- e) an increase in Appendices A and B;
- f) Remove the original standard output voltage Chapter 8;
- g) Remove the original standard differential axial ratio 10.6;
- h) Remove the original standard in Appendix A;
- i) of this section reg number and IEC 60268-4:2004 "Sound system equipment - Part 4. microphone" (English Version) consistent.

Correspondence between the consistency of the standards of international documents and normative references of the following documents.

--- GB/T 8898-2011 audio, video and similar electronic apparatus - Safety requirements (IEC 60065:2005, MOD) GB/T 12060.4-2012/IEC 60268-4:2004

--- GB/T 12060.11-2012 Sound system equipment - Part 11. Sound system equipment connected with the interconnection application (IEC 60268-11. 1987, NEQ)

--- GB/T 15212-1994 broadcast and similar sound system with connected applications (eqvIEC 60268-12. 1987)

--- GB/T 15381-1994 audio conferencing systems and electrical performance requirements (eqvIEC 60914. 1988)

--- GB/T 15644-1994 interconnection of equipment in audiovisual systems connected application (neqIEC 60574-3. 1983) this part is proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This part of the National Audio, video and multimedia systems and equipment Standardization Technical Committee (SAC/TC242) centralized.

This part mainly drafted by. Jiangsu Electronic Information Products Quality Supervision and Inspection Institute, Nanjing University Institute of Acoustics, Shenzhen Hao Well Acoustics Company.

1 Scope

This section GB/T 12060 specifies the electrical impedance, sensitivity, directivity pattern, dynamic range and external influences sound system microphones Measurement method.

This section applies to all sound system microphones for language and music, but applicable to a multi-channel audio through a microphone for each Channel, such as a stereo microphone or similar purposes. This section also applies to the embedded microphone and digital audio output with analog characteristics microphone.

This section applies to a microphone includes all devices, such as transformers, preamp, or other element constituting an integral part of the microphone Member, until the manufacturer's output.

This section does not apply to the measurement microphone.

Note: Features This section does not fully describe the provisions of the subjective response of the microphone is necessary to do further work to arrive at new definitions and measurement methods to make.

Was used to illustrate that at least some subjective description of the performance of the microphone, you can later replace with objective characteristics.

2 Normative references

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

GB/T 12060.2-2011 Sound system equipment - Part 2. General Explanation of terms and calculation methods (IEC 60268-2. 1987, IDT) GB/T 12060.3-2011 Sound system equipment - Part 3. audio amplifier measurement (IEC 60268-3:2000, IDT) GB/T 12060.5-2011 Sound system equipment - Part 5. Methods for measuring performance main speaker (IEC 60268-5:2007 IDT) GB/T 14197-2012 preferred matching values for audio, video and audiovisual systems interconnection (IEC 61938:1996, IDT) GB/T 17626.2-2006 electromagnetic compatibility test and measurement techniques - Electrostatic discharge immunity test (IEC 61000-4-2:2001, IDT) GB/T 17626.3-2006 electromagnetic compatibility test and measurement technology RFEMS test (IEC 61000-4-3:2002, IDT) GB/T 20247-2006 acoustic reverberation chamber sound absorption measurements (ISO 354:2003, IDT) SJ/Z9140.1-1987 Sound system equipment - Part 1. General (idt IEC 268-1. 1985) IEC 60065:2005 Audio, video and similar electronic apparatus - Safety requirements (Audio, video and similar electronic apparatus - Safety requirements) IEC 60268-11. 1987 Sound system equipment connectors for the interconnection of applications (Sound system equipment - Part 11. Application of connectors for the interconnection of sound system components) IEC 60268-12. 1987 broadcast and similar sound systems connected applications (Sound system equipment - Part 12. Application of connectors for broadcast and similar use) IEC 60574-3. 1983 audiovisual system equipment connectors for the interconnection of applications (Audiovisual, video and television equipment and system - Part 3.