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

GB/T 12060.3-2011

Replacing GB/T 9001-1988

**Sound system equipment -- Part 3: Methods of measurement on
audio amplifiers**

声系统设备 第3部分:声频放大器测量方法

(English Translation)

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Foreword

GB/T 12060 "Sound system equipment" is divided into the following sections.

- 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 section GB/T 12060 Part 3.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method is equivalent to using IEC 60268-3:2000 "Sound system equipment - Part 3. Amplifiers" (in English).

This part made the following editorial changes.

- a) with a decimal point instead of a comma as the decimal point, " ";
- b) Remove the preface international standards;
- c) Figure 2b), "Overload Recovery Time = t_1-t_2 " to "overload recovery time = t_3-t_2 ".

This part is GB/T 9001-1988 "Sound system equipment - Part 3. Amplifiers" amendments.

Section compared with GB/T 9001-1988 The main changes are as follows.

- a) increase 3.1.2h);
- b) Remove GB/T 9001-1988 3.2.4 in the "Power of Influence";
- c) Remove GB/T 9001-1988 in Chapter 5, "Nominal source impedance";
- d) Remove GB/T 9001-1988 Chapter 8, "Special instructions";
- e) change GB/T 9001-1988 in 16.4.2 "measuring method" content;
- f) increase 14.5.2.2.3 "electricity bridge measurement input impedance";
- g) increase 14.5.2.2.4, "the source resistance of the two resistance measuring input

impedance";

h) increasing the GB/T 9001-1988 18.1 "rated load impedance" in the table of contents;

i) change GB/T 9001-1988 in 19.2.1 "feature interpretation" of the content;

j) 14.8 "protection circuit characteristics" and 14.9 "rated (distortion limit) output voltage or power duration";

k) increase in GB/T 9001-1988 in 22.4.1 "feature interpretation" of the content;

l) increase 14.12.7.2f);

m) increased 14.12.8.2j) and k);

n) increases 14.12.11 "weighted total harmonic distortion";

o) redefine the GB/T 9001-1988 in Chapter 25, "balance" of the content;

p) Remove GB/T 9001-1988 in Chapter 26, "outside influence" and Chapter 27, "stray field";

q) Remove GB/T 9001-1988 in Chapter 31, "provides classification characteristic" classification principles will apply to the relevant provisions;

r) section of this chapter, and article number IEC 60268-3:2000 "Sound system equipment - Part 3. Amplifiers" (in English) to maintain Consistent.

This Part replaces GB/T 9001-1988 "Sound system equipment - Part 3. Amplifiers." 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.

1 Scope

This section specifies the characteristics of the amplifier specifications should be given, as well as its corresponding measurement method.

This section applies to the professional or home sound system consisting of analog amplifier and an analog/digital amplifier in the analog part.

In general, the measurements given are the most direct relationship with the definition, but does not exclude recourse to get the equivalent results of other method.

This section provides the conditions and rated the standard measurement conditions, namely as a condition below specification and measurement.

2 Normative references

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

GB/T 5465.2-2008 Graphical symbols for electrical equipment - Part 2. Graphical symbols (IEC 60417DB. 1973, IDT) GB/T 6278 analog program signal GB 8898-2011 Audio, video and similar electronic apparatus - Safety requirements (eqv IEC 60065:1998 (sixth edition)) GB/T 12060.2-2011 Sound system equipment - Part 2. General Explanation of terms and calculation methods (IEC 60268-2. 1987, IDT) GB/T 14197 Preferred matching values for audio, video and audiovisual systems interconnection (IEC 61938, IDT) GB/T 17626.17-2005 electromagnetic compatibility test and measurement technology dc input power port immunity test ripple (IEC 61000-4-17:2002, IDT) GB/T 17626.29-2006 electromagnetic compatibility test and measurement technology dc input power port voltage dips, short interruptions and Voltage variations immunity tests (IEC 61000-4-29:2000, IDT) SJ/Z9140.1-1987 Sound system equipment - Part 1. General (idt IEC 60268-1. 1988) Condition 3

3.1.1 Introduction

In order to facilitate the measurement amplifier arrangement, respectively, under the heading of this part of the conditions and rated conditions as stated in the standard measurement conditions for several groups.

The term "nominal" full explanation see GB/T 12060.2-2011.

Amplifier is rated conditions.

- Rated supply voltage;
- Nominal source impedance;
- Rated source emf;
- Rated load impedance;
- Rated total harmonic distortion, or rated (distortion limits) output voltage or power;
- Rated mechanical and climatic conditions.

Note 1: The total harmonic distortion and (distortion limits) output voltage or power are interrelated. Not both as the rated condition, because usually a given