

ICS 33.160.50
CCS M 70



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

GB/T 12060-1989

**Sound system equipment -- Part 1: General
(English Translation)**

Issued on: May 31, 2017

Implemented on: December 1, 2017

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

Table of Contents

Preface

1 Scope

2 Normative reference document

Foreword

GB/T 12060 "sound system equipment" includes the following parts.

- Part 1. Overview;
- Part 2. General terms for interpretation and calculation;
- Part 3. Measurement methods for audio amplifiers;
- Part 4. Microphone measurement method;
- Part 5. Main performance test methods for loudspeakers;
- Part 6. Auxiliary passive components;
- Part 7. Headset measurement method;
- Part 8. Automatic gain control devices;
- Part 9. Artificial reverberation, time delay and frequency shift device measurement methods;
- Part 10. Peak program level meter;
- Part 11. Application of connectors for acoustic system equipment interconnection;
- Part 12. Application of connectors for broadcast and similar sound systems;
- Part 13. Speaker listening test;
- Part 14. Circular and oval loudspeakers, dimensions and mounting dimensions;
- Part 16. Assessment of the objective level of language intelligibility by the language transmission index (STI);
- Part 17. Standard volume;
- Part 18. Peak program level meter - Digital audio peak level meter.

This part is part 1 of GB/T 12060.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part uses the re-drafting method to modify the use of IEC 60268-1. 1985 "Sound System Equipment Part 1. Overview" and its amendments Amd. 1. 1988 and Amd. 2. 1988.

The technical differences between this part and IEC 60268-1. 1985 are as follows.

- Table 1 removes the contents of 1/2 octave (see Chapter 4);
- increased the use of a magnetic flux meter to measure the strength of the magnetic field (see 13.2);
- Amendments to Table A.2 in accordance with IEC 60268-1. 1985 No. 1 Amendment Amd.1. 1988;
- 12.1 of the original standard was modified in accordance with IEC 60268-1. 1985 No. 2 Amd.2. 1988 (see 13.1).

This section makes the following editorial changes.

- Added "preface" and "normative reference document";
- the "scope" has been modified, the standard "sound system equipment" component of the content into the "preface";
- adjust 7.2.3 to 7.3;
- Added component names in Figure 3 and Figure A.1;
- deleted in Table 2 repeated 630Hz line;
- Figure 5 will be adjusted to Figure 1, the location of the chart adjusted to the relevant text, easy to read and implement the standard.

1 Scope

GB/T 12060 is suitable for any type of sound system and its components or accessories for the sound system.

GB/T 12060 by listing the characteristics of its useful features and the development of these characteristics of the unified test method, how to determine the sound system the performance of the equipment and the comparison of such equipment and how to determine its proper practical use.

GB/T 12060 is limited to describing different characteristics and their corresponding measurement methods, and generally does not specify performance (except for Part 10).

This part of GB/T 12060 specifies the measurement unit of the acoustic system equipment, the frequency of measurement, the amount to be specified and its accuracy, Logo and other general specification requirements.

This part applies to any type of sound system and its components or accessories for the

sound system.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article. For undated references, the latest edition (including all modifications) applies to this document.

GB/T 3240-1982 Common frequencies in acoustic measurements (neq ISO 266:1975)
 GB/T 3241-2010 Electromagnetism octave and fractional octave filters (IEC 61260:1995, MOD)
 GB/T 3769-2010 Electroacoustics Drawing frequency characteristics and scale and dimensions of polar plots (IEC 60263:1982, IDT)
 GB/T 3785.1-2010 electroacoustics sound level meter - Part 1. Specifications (IEC 61672-1:2002, IDT)
 GB 4943.1-2011 Information technology - Equipment safety - Part 1. General requirements (IEC 60950-1:2005, MOD)
 Graphical symbols for electrical equipment - Part 2. Graphical symbols (IEC 60417 DB:2007, IDT)
 GB/T 5465.2-2008 GB 8898-2011 Safety requirements for audio, video and similar electronic equipment (IEC 60065:2005, MOD)
 IEC 60027 (all parts) Letter symbols for electrical use (Letter symbols to be used in electrical technology)
 IEC 60068 (all parts) Basic environmental test procedures (Basic environmental testing procedures)
 ITU-R BS.468-4. Measurement of audio noise levels in sound broadcasting (Measurement of audio-frequency noise voltage level in sound broadcasting)
 Unit of measurement and unit system the units of measurement in this section use the International System of Units (SI units).

4 Measuring frequency

If the measurements are made at discrete frequencies, these frequencies shall be the preferred frequencies specified in GB/T 3240-1982 for acoustic measurements, see

Table 1. If the measurement is relative to a reference frequency and there is no clear reason for negation, the frequency shall be the standard reference frequency of 1000 Hz.

If the measurement uses only one signal frequency, the signal frequency should be the selected reference frequency. If the measurement is carried out at several different frequencies should include the selected reference frequency, the other frequency should be selected so that the measurement results can fully represent the characteristics of the entire effective frequency range.

If the measurement is carried out in a band with a constant relative bandwidth, the 1/1 octave frequency described in 7.3 and 1/3 Frequency.