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

GB/T 9029-2011

Replacing GB/T 9029-1988

**Methods of the measurement of speed fluctuations in sound
recording and reproducing equipment**

录放音设备抖晃测量方法

(English Translation)

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Foreword

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

This revised standard adopts the International Standard IEC 60386 "sound recording and reproducing apparatus jitter measurement method" (1972 edition, and modify the file).

This standard replaces GB 9029-1988 "sound recording and reproducing apparatus jitter measurement method." this standard and GB/T 9029-1988 compared to the main changes are as follows.

- Increasing the foreword;
- By 1988 to modify the file to modify Chapter 4;
- Added Appendix B;
- According to GB 1.1-2000 requirements for text editing.

The difference between the original standard and IEC 60386 as follows.

- Deleted from the French text published multilingual versions of international standards;
- Remove the cover of international standards and directory preface;
- The international standards incorporated into the text of the amendment;
- Table 1 and Figure 1 in Chapter 4;
- The number of FIG. 3 to FIG. 2, and placed in 4.1;
- 2 will be renumbered 3 and placed in 4.2.1;
- Increase the introductory phrase in Appendix B, see Chapter 3.

The 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 Committee (SAC/TC242) centralized.

This standard drafting units. China Electronics Technology Group Corporation Institute.

1 Scope

This standard specifies the method for measuring jitter of devices using weighted peak of technology.

This standard applies to the use of technology-weighted peak jitter measurement of various tape recorder and record player.

2 Terms and definitions

The following terms and definitions apply to this document.

Jitter flutter

In the recording or playback, the recording carrier modulation frequency caused by irregular movement in 10Hz or more to send a signal Students FM phenomenon.

Shaking wow

In the recording and playback process, the modulation frequency due to the irregular movement of the record carrier arising from the letter of 0.1Hz ~ 10Hz no. parasitic FM phenomenon.

Drift drift

During recording and playback, the record carrier speed of slow changes.

3 Jitter measurements

a) jitter measuring sound recording device using the method given peak.

b) measuring 3150Hz frequency.

c) shall be measured only on the (recording and playback section) a part of the system, can not simultaneously be in two parts. Then the rest of the system Jitter section is negligible.

In the measurement results should indicate the measurement conditions, for example, only portions of the recording, playback is only part of or the entire recording systems.

d) when c) the conditions are not met, it allows to record a 3150Hz test signal, and then play a few times this recording signal Cassette player recording method of measuring the jitter. Recording each measurement of jitter and the arithmetic average of the measurements.

Jitter measurement should not be carried out under conditions of simultaneous recording

and playback of.

e) In order to obtain stable and reproducible jitter readings recommended 2delta method to eliminate random peaks.

Other notes See Appendix f) measurement method B.

4 Measuring equipment and measurement methods

Weighted response curve should be in accordance with Table 1 and Figure 1.

Note: unweighted response curve (at least in the flat between 0.1Hz ~ 200Hz) should be able to provide useful additional information about the jitter sources. For non-weighted sound Response curve, tolerance and measurement methods are not specified.

Additional requirements for measuring equipment given in Appendix A.