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

GB/T 14198-2012

Replacing GB/T 14198-1993

General specification for microphones

传声器通用规范

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Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009. This standard is GB/T 14198-1993 "General technical conditions for microphones" revision. This standard and GB/T 14198-1993 compared to the main changes are as follows: A) The name of this standard is changed from "Microphone General Technical Conditions" to "General Specifications for Microphones". B) increase the "catalog and preface" according to the

requirements of GB/T 1.1; separate the "requirements" and "measurement methods" into two chapters. C) "Subject content and scope of application" to "scope", delete "and high fidelity microphone" in "scope", increase "does not apply to wireless Microphone, digital microphone ". D) In accordance with the requirements of GB/T 1.1, supplemented the "normative reference document" guide language. E) "Piezo Microphones" by "Classification by Type of Conversion Principle"; and in the "Equivalent Noise Level" column of Table 5, add " Device "required" note ". F) Remove the "YL" connector in the "Mechanical connection" section. Increase "

Note 1. As specified in the product specification, this standard is not included Including the connector, you should be in the product specifications and product specifications that the use of the connector model and contact distribution. " G) Add "other frequency response" in the "frequency response" by product specification. H) In Table 4, remove the "400Omega" braces from "50Omega", "150Omega", "250Omega", "1kOmega" impedance values, and remove the "400Omega" Remove the "20kOmega" impedance of the brackets, remove the "4kOmega", "10kOmega" and "50kOmega". The series values listed in the table are preferred Impedance value. I) In Table 5, delete the "moving microphone" item, add "

Note. moving coil microphone does not have this indicator." J) "directivity" in the original "directivity" to "point to the frequency characteristics", increase the "directional response pattern." Added in Table 6 A variety of directional types of microphones "directional response pattern" requirements, the increase in Table 7 specifies the measurement microphone "directivity response diagram The "directivity" to the "directional frequency characteristics" of the content in the "electro-acoustic performance measurement method" part of the increase Plus a "directional response pattern" of the measurement method. K) change the "pre-amplifier overload output equivalent sound pressure level" to "overload sound pressure level", the requirement is "in the frequency of 250Hz ~ 8kHz Fan Within the microphone, the total harmonic distortion of the output voltage of the microphone is not more than 1% of the maximum sound pressure level specified by the product specification, but not less than 114dB. " L) in the "other performance" in the "power frequency of the external magnetic field caused by the equivalent sound pressure level" to "external magnetic field caused by the equivalent sound pressure level"; Delete the "wind caused by the equivalent sound pressure level" in the "measurement method" at the same time delete the corresponding measurement method clause; increase "electrostatic discharge Immunity "and" electromagnetic field (RF) caused by the equivalent sound pressure level "requirements, in the" electrostatic discharge test "delete" output change allowed Within ± 3 dB "and specify the corresponding measurement method in the" Measurement method "chapter. M) In the "Inspection Rules" section add "identification test". N) In the "Table 14 batch test items, unqualified classification, inspection level and AQL value" will be "A group of test level II A The AQL value of the unqualified product is changed to 1.0, the AQL value of the unqualified product of class B in S-2 is changed to 2.5, The AQL value of category A nonconforming product in test level II is changed to 1.0 ". This standard is proposed by the

Ministry of Industry and Information Technology of the People's Republic of China. This standard is nationalized by the National Audio, Video and Multimedia Systems and Equipment Standardization Technical Committee (SAC/TC242). The drafting unit of this standard. Beijing Seventy-seven Sound Co., Ltd. The main drafters of this standard. Hua Zixing, Wang Jing, Yao Guofeng, Yang Baogen, Yan Xin. This standard replaced the previous version of the standard release.

--- GB/T 14198-1993. General specification for microphones

1 Scope

GB/T 14198-2012 is the Chinese national standard on general specification for microphones, in the field of telecommunications and audio-video engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 31 December 2012 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 June 2013. Classification: ICS 33.160, CCS M72. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the classification, requirements, measurement methods, inspection rules, marking packaging and storage transportation of the microphone. This standard applies to language, music and other audio within the scope of the general sound system equipment with a microphone, not for wireless microphone, digital transmission Sound device. A microphone suitable for use in this standard includes, for example, a transformer, a preamplifier, or other parts that make up the complete part of the microphone, Set the output of all devices.

2 Normative reference documents

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

GB/T 2423.1-2008 Environmental testing for electric and electronic products - Part 2. Test methods - Test A. Low temperature (idt IEC 60068-2-1..1990)

GB/T 2423.2-2008 Environmental testing for electric and electronic products - Part 2. Test methods - Test B. High temperature (idt IEC 60068-2-2..1994)

GB/T 2423.3-2006 Environmental testing for electric and electronic products - Part 2. Test

methods - Test Cab. constant damp heat test (

IEC 60068-2-78..2001, IDT)

GB/T 2423.6-1995 Environmental testing for electric and electronic products - Part 2. Test methods - Test Eb and guidance. Collisions (Idt IEC 68-2-29. 1987)

GB/T 2423.10-2008 Environmental testing for electric and electronic products - Part 2. Test methods - Test Fc. Vibration (sinusoidal) (

IEC 60068-2-6..1995, IDT)

GB/T 2828.1-2003 Sampling inspection procedures - Part 1. Patch inspection by retrieval of quality limit (AQL) Plan (ISO 2859-1..1999, IDT)

GB/T 2829-2002 Periodic inspection counting Sampling procedures and tables (for inspection of the stability of the production process)

GB 8898-2011 Safety requirements for audio, video and similar electronic equipment (eqv IEC 60065..1998)

GB/T 12060.4-2012 Sound system equipment - Part 4. Microphone measurement method (IEC 60268-4..2004, IDT)

GB/T 14197-2012 Preferred mating values for audio, video and audiovisual systems interconnection (IEC 61938..1996, IDT)

GB/T 15212-1994 Application of connectors for broadcast and similar sound systems (eqv IEC 60268-12. 1987)

3 Terms and definitions

GB/T 12060.4-2012 Definitions of terms and definitions apply to this document.

4 Classification

4.1 Classification according to the principle of conversion principle Microphones according to the principle of energy conversion can be divided into electric, capacitive and piezoelectric microphone. See Table 1. Table

1 Classification by the principle of conversion principle Name transposition principle Moving coil microphone electric type Capacitive microphone Electret microphone Capacitive Piezo Microphone Piezoelectric

4.2 Classification by directivity type The microphone can be divided into omnidirectional, unidirectional (heart-shaped, supercardioid and super-pointing) and bidirectional microphones according to the directivity type. The chart is shown in Table 2. Table

2 Classification by directivity type and legend Directivity type legend Omnidirectional