

Sound system equipment Part 24: Headphones and earphones – Active acoustic noise cancelling characteristics (IEC 100/3880/CDV)

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Aufgrund von Stellungnahmen kann die endgültige Fassung dieser OVE-Norm vom vorliegenden Entwurf abweichen. Stellungnahmen (schriftlich) bis 2023-06-01 an den OVE.

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Ident (IDT) mit IEC 100/3880/CDV
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Die von IEC TC 100 ausgearbeitete Internationale Norm wurde als Entwurf zu einer Europäischen Norm **EN IEC 60268-24** den CENELEC-Mitgliedern zur Abstimmung vorgelegt. Im Falle eines positiven Abstimmungsergebnisses im Sinne der CENELEC-Regeln wird dieser Entwurf zu einer EN führen.

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Da eine Übersetzung in die deutsche Sprache zu diesem Zeitpunkt noch nicht vorhanden ist, wird – um die von CENELEC vorgegebene Einspruchsfrist einzuhalten – die englischsprachige Fassung des IEC 100/3880/CDV zur Information und Stellungnahme vorgelegt.

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COMMITTEE DRAFT FOR VOTE (CDV)

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IEC TA 20 : ANALOGUE AND DIGITAL AUDIO	
SECRETARIAT: Japan	SECRETARY: Mr Nobukazu Suzuki
OF INTEREST TO THE FOLLOWING COMMITTEES: TC 100	PROPOSED HORIZONTAL STANDARD: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.
FUNCTIONS CONCERNED: ☐ EMC ☐ ENVIRONMENT ☐ QUALITY ASSURANCE ☐ SAFETY	
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TITLE:

SOUND SYSTEM EQUIPMENT – Part 24: Headphones and earphones – active acoustic noise cancelling characteristics

PROPOSED STABILITY DATE: 2026

NOTE FROM TC/SC OFFICERS:

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SOUND SYSTEM EQUIPMENT –

**Part 24: HEADPHONES AND EARPHONES -
ACTIVE ACOUSTIC NOISE CANCELLING CHARACTERISTICS**

FOREWORD

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International Standard IEC 60268-24 has been prepared by Technical Area 20 Analogue and digital audio, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
XX/XX/FDIS	XX/XX/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

108 The committee has decided that the contents of this document will remain unchanged until the
109 stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to
110 the specific document. At this date, the document will be

- 111 • reconfirmed,
- 112 • withdrawn,
- 113 • replaced by a revised edition, or
- 114 • amended.

115

116 The National Committees are requested to note that for this document the stability date
117 is 20XX..

118 THIS TEXT IS INCLUDED FOR THE INFORMATION OF THE NATIONAL COMMITTEES AND WILL BE DELETED
119 AT THE PUBLICATION STAGE.

120

121

INTRODUCTION

122 This document specifies both methods of measurement and reporting of data for noise
123 cancelling characteristics on active acoustic noise cancelling headphones and earphones.

124 Active acoustic noise cancelling headphones and earphones are commonly used to reduce the
125 environmental acoustic noise to which the ear is exposed.

126 However, to date, there is no international standard for evaluating the noise cancelling
127 performance of active acoustic noise cancelling headphones and earphones. Manufacturers
128 currently measuring noise cancelling performance use only proprietary methods, and the
129 resulting metrics are neither uniform nor comparable.

130 This standard provides measurement methods and metrics for the noise cancelling performance
131 of active acoustic noise cancelling headphones and earphones. The resulting measured and
132 calculated values enable comparison of performance data obtained in different locations.

133

SOUND SYSTEM EQUIPMENT –**Part 24: HEADPHONES AND EARPHONES -
ACTIVE ACOUSTIC NOISE CANCELLING CHARACTERISTICS****1 Scope**

This document is applicable to active acoustic noise cancelling headphones and earphones which have the function of reducing the noise heard by the user by the output sound from the transducer generated by the environment noise detection microphone and the noise reduction signal processing circuit.

This document specifies the terms and definitions of this type of headphones or earphones, the characteristics to be specified, and the measurement and evaluation methods.

The noise detection microphones are mounted in the body, on the surface, or on an accessory of the headphones or earphones. Signal processing circuits are analogue and digital electronic circuits.

This document does not deal with equipment intended for hearing protection.

The noise cancelling characteristic measurement methods may be applied to headphones and earphones having no active noise cancelling function.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60268-1:1985, *Sound system equipment. Part 1: General*

IEC 61672-1:2013, *Electroacoustics - Sound level meters - Part 1: Specifications*

IEC 61260-1:2014, *Electroacoustics - Octave-band and fractional-octave-band filters - Part 1: Specifications*

IEC 60068-1:2013, *Environmental testing - Part 1: General and guidance*

IEC 60050-702:1992, *International Electrotechnical Vocabulary - Chapter 702: Oscillations, signals and related devices*

IEC 60268-7:2010, *Sound system equipment - Part 7: Headphones and earphones*

IEC 60318-4:2010, *Electroacoustics – Simulators of human head and ear –Part4: Occluded-ear simulator for the measurement of earphones coupled to the ear by means of ear inserts*