Sound system equipment: Headphones and earphones associated with personal music players - Maximum sound pressure level measurement methodology -- Part 2: Matching of sets with headphones if either or both are offered separately, or are offered as one package equipment but with standardised connectors between the two allowing to combine components of different manufacturers or different design

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50332-2:2013 sisaldab Euroopa standardi EN 50332-2:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 50332-2:2013 consists of the English text of the European standard EN 50332-2:2013.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 25.10.2013.	Date of Availability of the European standard is 25.10.2013.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 17.140.50, 33.160.50

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50332-2

October 2013

ICS 17.140.50; 33.160.50

Supersedes EN 50332-2:2003

English version

Sound system equipment: Headphones and earphones associated with personal music players - Maximum sound pressure level measurement methodology - Part 2: Matching of sets with headphones if either or both are offered separately, or are offered as one package equipment but with standardised connectors between the two allowing to combine components of different manufacturers or different design

Equipement de systèmes acoustiques: Casques et écouteurs associés avec un baladeur - Méthode de mesure de niveau maximal de pression acoustique - Part 2 : Adaptation des équipements avec des écouteurs provenant de différents fabricants, ou provenant d'un équipement complet mais avec des connecteurs normalisés entre les deux, permettant d'associer des composants provenant de différents fabricants ou bien de conception différente

Elektroakustische Geräte: Kopfhörer und Ohrhörer in Verbindung mit tragbaren Audiogeräten - Verfahren zur Messung des maximalen Schalldruckpegels - Teil 2: Anpassung von Geräten und Kopfhörern, wenn eine der beiden oder beide Komponenten getrennt angeboten werden

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Ref. No. EN 50332-2:2013 E

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Foreword

This document (EN 50332-2:2013) has been prepared by CLC/TC 108X, "Safety of electronic equipment within the fields of Audio/Video, Information Technology and Communication Technology".

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2014-09-23
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2016-09-23

This document supersedes EN 50332-2:2003.

EN 50332-2:2013 includes the following significant technical changes with respect to EN 50332-2:2003:

- deletion of limits;
- addition of digital signals;
- adaptations to use the term "personal music players".

EN 50332, *Sound system equipment: Headphones and earphones associated with personal music players — Maximum sound pressure level measurement methodology,* is composed with the following parts:

– *Part 1: General method for "one package equipment*";

– *Part 2: Matching of sets with headphones if either or both are offered separately, or are offered as one package equipment but with standardised connectors between the two allowing to combine components of different manufacturers or different design*.

The Part 1 of this standard describes conditions and procedures for combination of player units and headphones sold as “one-package sets”. The sound pressure limitation (SPL) of these sets is lost when players or headphones with standardised sockets and plugs are arbitrarily combined.

This Part 2 provides measurement methods for the matching values which guarantee the SPL limit also for the aforementioned condition.

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1 Scope

This Part 2 of EN 50332 specifies methods of measuring the matching values for the use of personal music players and headphones/earphones defined for the use with those and with standardised connectors or interfaces allowing to combine components of different manufacturers or different design sold separately in order to avoid possible hearing impairment by excessive sound pressure resulting from them.

Compared with “one-package sets“ the sound pressure level at the ear cannot be fixed by only one condition but needs at least two characteristics, one each for player and the headphones/earphones, defined by the matching values for their connection.

Requirements for protection against excessive sound pressure from personal music players are given in EN 60950-1:2006/A12:2011 and EN 60065:2002/A12:2011.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

HD 483.1 S2, *Sound system equipment — Part 1: General (IEC 60268-1)*

EN 50332-1:2013, *Sound system equipment: Headphones and earphones associated with personal music players — Maximum sound pressure level measurement methodology — Part 1: General method for "one package equipment"*

EN 60268-7:2011, *Sound system equipment — Part 7: Headphones and earphones (IEC 60268-7:2010)*

EN 61260, *Electroacoustics — Octave-band and fractional-octave-band filters (IEC 61260)*

EN 61672-1, *Electroacoustics — Sound level meters — Part 1: Specifications (IEC 61672-1)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE For more definitions, see EN 50332-1:2013, EN 60268-7:2011 and the basic standards for electroacoustics.

3.1
portable audio headphones and earphones
headphones and earphones, which are intended to be used with personal music players and to be mainly used for listening to the music outdoors

3.2
simulated programme signal characteristic voltage
SPCV
The input voltage for a wide band signal at an output SPL of 94 dB, defined in EN 60268-7:2011, 8.3.4.