



BSI Standards Publication

Hearing protectors — Safety requirements

Part 8: Entertainment audio earmuffs

National foreword

This British Standard is the UK implementation of EN 352-8:2020. It supersedes BS EN 352-8:2008, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PH/7, Hearing protectors.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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English Version

Hearing protectors - Safety requirements - Part 8: Entertainment audio earmuffs

Protecteurs individuels contre le bruit - Exigences de
sécurité et essais - Partie 8 : Serre-tête avec entrée
audio pour le divertissement

Gehörschützer - Sicherheitstechnische Anforderungen
und Prüfungen - Teil 8: Audiokapselgehörschützer für
Unterhaltungszwecke

This European Standard was approved by CEN on 18 June 2018.

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European foreword

This document (EN 352-8:2020) has been prepared by Technical Committee CEN/TC 159 “Hearing protectors”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2021, and conflicting national standards shall be withdrawn at the latest by November 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 352-8:2008.

This document has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Regulation(s).

For relationship with EU Regulation(s), see informative Annex ZA, which is an integral part of this document.

In comparison with the previous edition, the following technical modifications have been made:

Clause/Paragraph/Table/Figure	Change
4.2.1	products with Bluetooth added
4.2.1.3	products with electrical audio input: new requirements
Clause 5	removed, reference to EN 13819-3:2019, 7.4.2, 7.5.1 and 7.6.1 added
Annex A	removed
NOTE The technical changes referred to include the significant technical changes from the EN revised but is not an exhaustive list of all modifications from the previous edition.	

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The requirements of this standard are concerned with the entertainment audio performance of the earmuffs.

EN 352-8 is part of a family of standards describing product requirements:

- EN 352-1, *Hearing protectors — General requirements — Part 1: Earmuffs*
- EN 352-2, *Hearing protectors — General requirements — Part 2: Earplugs*
- EN 352-3, *Hearing protectors — General requirements — Part 3: Earmuffs attached to head protection and/or face protection devices*
- EN 352-4, *Hearing protectors — Safety requirements — Part 4: Level-dependent earmuffs*
- EN 352-5, *Hearing protectors — Safety requirements — Part 5: Active noise reduction earmuffs*
- EN 352-6, *Hearing protectors — Safety requirements — Part 6: Earmuffs with safety-related audio input*
- EN 352-7, *Hearing protectors — Safety requirements — Part 7: Level-dependent earplugs*
- EN 352-8, *Hearing protectors — Safety requirements — Part 8: Entertainment audio earmuffs*
- EN 352-9, *Hearing protectors — Safety requirements — Part 9: Earplugs with safety-related audio input*
- EN 352-10, *Hearing protectors — Safety requirements — Part 10: Entertainment audio earplugs*

Test methods for these requirements are described in the following standards:

- EN 13819-1, *Hearing protectors — Testing — Part 1: Physical test methods*
- EN 13819-2, *Hearing protectors — Testing — Part 2: Acoustic test methods*
- EN 13819-3, *Hearing protectors — Testing — Part 3: Supplementary acoustic test methods*

An associated standard EN 458 covers selection, use, care and maintenance of hearing protection.

1 Scope

This document is applicable to entertainment audio earmuffs. It specifies requirements on construction, design, performance, marking and user information relating to the inclusion of the entertainment audio facility.

Entertainment audio earmuffs use a wired or wireless system through which audio entertainment can be relayed. They may incorporate a radio receiver set or music player for entertainment or allow audio input from external devices.

They also offer the possibility to communicate warning signals or messages. The product standards impose a limitation on the reproduced sound pressure level at the ear.

The entertainment audio signal can be transmitted by radio (broadcast or local plant programmes) or by wire or other communication like Bluetooth.

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.

EN 352-1:2020, *Hearing protectors — General requirements — Part 1: Earmuffs*

EN 352-3:2020, *Hearing protectors — General requirements — Part 3: Earmuffs attached to head protection and/or face protection devices*

EN 13819-3:2019, *Hearing protectors — Testing — Part 3: Supplementary acoustic test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 352-1:2020, EN 352-3:2020 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

entertainment audio earmuff

earmuff additionally providing reproduced sound for entertainment purposes

Note 1 to entry: It may be designed with an electrical audio input, with built-in broadcast receivers or with other built-in wireless receivers like Bluetooth. Or it may be part of a complete system composed of transmitters and receiving audio earmuffs.

3.2

sound output level

A-weighted diffuse-field related sound pressure level produced by the entertainment audio facility of an earmuff for a given input signal