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Australian STANDARD

Acoustics — Methods for calculating loudness

Part 1: Zwicker Method

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This Australian Standard® was prepared by EV-010, Acoustics Community Noise. It was approved on behalf of the Council of Standards Australia on 27 February 2019.

This Standard was published on 8 April 2019.

The following are represented on Committee EV-010:

Association of Australasian Acoustical Consultants
Australian Acoustical Society
Austroads
Bureau of Steel Manufacturers of Australia
Department of Defence (Australian Government)
Engineers Australia
University of Sydney

This Standard was issued in draft form for comment as DR AS ISO 532.1:2018.

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ISBN 978 1 76072 424 5

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First published as AS 3657.2—1996.
Revised and redesignated as AS ISO 532.1:2019.

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Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee EV-010, Acoustics Community Noise, to supersede AS 3657.2—1996, *Acoustics—Expression of the subjective magnitude of sound or noise, Part 2: Method for calculating loudness level.*

The objective of this Standard is to specify two methods for estimating the loudness and loudness level of sounds as perceived by otologically normal persons under specific listening conditions. The first method is intended for stationary sounds and the second method for arbitrary non-stationary (time-varying) sounds, including stationary sounds as a special case.

The methods can be applied to any sound recorded as single-channel measurements using a microphone, or as multi-channel measurements, for example by means of a head and torso simulator (see Annex D). Since most important technical sounds are time-varying, a model of time-varying loudness is preferable. The methods are based on the Zwicker algorithm.

This Standard is identical with, and has been reproduced from, ISO 532-1:2017, *Acoustics — Methods for calculating loudness — Part 1: Zwicker method*.

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

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The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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