



SLOVENSKI STANDARD

SIST EN 62760:2016

01-september-2016

Metoda zvočnega predvajanja za normalizirano raven glasnosti (IEC 62760:2016)

Audio reproduction method for normalized loudness level (IEC 62760:2016)

Audio-Wiedergabeverfahren für normalisierten Lautstärkepegel (IEC 62760:2016)

Méthode de reproduction audio pour niveau d'isophonie normalisé (IEC 62760:2016)

Ta slovenski standard je istoveten z: **EN 62760:2016**

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17.140.01	Akustična merjenja in blaženje hrupa na splošno	Acoustic measurements and noise abatement in general
33.160.30	Avdio sistemi	Audio systems

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EUROPEAN STANDARD

EN 62760

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2016

ICS 33.160.30

English Version

Audio reproduction method for normalized loudness level (IEC 62760:2016)

Méthode de reproduction audio pour niveau d'isotonie
normalisé
(IEC 62760:2016)

Audio-Wiedergabeverfahren für normalisierten
Lautstärkepegel
(IEC 62760:2016)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 62760:2016**European foreword**

The text of document 100/2591/FDIS, future edition 1 of IEC 62760, prepared by Technical Area 11 "Quality for audio, video and multimedia systems", of IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62760:2016.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-12-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-03-16

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SIST EN 62760:2016

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In the official version, for Bibliography, the following note has to be added for the standard indicated :

IEC 61672-1 NOTE Harmonized as EN 61672-1.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62574	-	Audio, video and multimedia systems - General channel assignment of multichannel audio	EN 62574	-
ITU-R Recommendation BS.1770-3	08/2012	Algorithms to measure audio programme loudness and true-peak audio level	-	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Audio reproduction method for normalized loudness level

Méthode de reproduction (audio pour niveau d'isophonie normalisé)

[SIST EN 62760:2016](https://standards.iteh.ai/catalog/standards/sist/1044d8ec-a02e-4e3c-b8ea-817B63eb6f8/sist-en-62760-2016)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

AUDIO REPRODUCTION METHOD FOR NORMALIZED LOUDNESS LEVEL

FOREWORD

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International Standard IEC 62760 has been prepared by technical area 11: Quality for audio, video and multimedia systems, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

The text of this standard is based on the following documents:

FDIS	Report on voting
100/2591/FDIS	100/2635/RVD

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

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

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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INTRODUCTION

The loudness level of audio reproduction varies according to the level of the input source and whether it is mono, stereo or multichannel. Without a suitable form of automatic control, users are forced to adjust the volume level of equipment to obtain an appropriate loudness level when the user selects another audio source or audio mode such as mono, stereo or downmix. There are some specific adjustment methods applied to consumer equipment but these methods are not standardized. For broadcast audio, broadcasting studios apply loudness level measurements and settle a reference level for their audio content depending on ITU-R BS.1770 and ITU-R BS.1864, the first standardisation work for loudness level in broadcasting. The audio loudness levels of other services are also expected to be standardized.

Broadcast audio with regulated loudness levels can be reproduced correctly with appropriately-configured reproduction systems and equipment. This International Standard specifies the method for reproduction with channel mode level setting and other level settings, and provides improved quality of listening for users. This method is also applicable for various audio content other than broadcasting audio. This International Standard is applicable to electrical signal levels and excludes acoustic audio levels from loudspeakers.

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AUDIO REPRODUCTION METHOD FOR NORMALIZED LOUDNESS LEVEL

1 Scope

This International Standard specifies the audio reproduction method for normalized loudness level of audio sources for consumer equipment and systems.

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.

IEC 62574, *Audio, video and multimedia systems – General channel assignment of multichannel audio*

ITU-R BS.1770-3:08/2012, *Algorithms to measure audio programme loudness and true-peak audio level*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

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

3.1.1

loudness

subjective notion describing the magnitude of the perception of the sound by the human sense of hearing

Note 1 to entry: The magnitude of the auditory sensation mainly depends on sound pressure, it differs with frequency and sustain time of sound (see ISO 226:2003).

Note 2 to entry: The loudness is based on a sound that is pure tone of 40 dB sound pressure level and 1 kHz frequency, whose level is defined as 1 sone. Its symbol is N .

3.1.2

loudness level

level of a sound equal to the sound pressure level of 1 kHz sine wave

Note 1 to entry: The loudness level is sensed by humans as equal to the subjective sound level. The reference is 1 kHz sine wave and 40 dB sound pressure level, its loudness level is 40 phon.

Note 2 to entry: The symbol for loudness level is L_N and its unit is phon.

3.1.3

gated loudness

numerical value of loudness measured according to ITU-R BS.1770-3

Note 1 to entry: Gated loudness is measured in LKFS.

3.1.4

LKFS

loudness, K-weighted, relative to nominal full scale