



SLOVENSKI STANDARD
SIST HD 455 S1:1999

01-julij-1999

Sound transmission using infra-red radiation (IEC 60764:1983)

Sound transmission using infra-red radiation

Tonübertragung unter Verwendung von Infrarotstrahlung

Transmission du son en utilisant le rayonnement infrarouge

Ta slovenski standard je istoveten z: HD 455 S1:1985

[SIST HD 455 S1:1999](https://standards.iteh.ai/catalog/standards/sist/9fda93ec-3b5e-4e55-971c-992747945fba/sist-hd-455-s1-1999)

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ICS:

33.160.99	Druga avdio, video in avdiovizuelna oprema	Other audio, video and audiovisual equipment
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SIST HD 455 S1:1999

en

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CENELEC

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SOUND TRANSMISSION USING INFRA-RED RADIATION

Transmission du son utilisant
le rayonnement infrarouge

Tonübertragung unter Verwendung
von Infrarot-Strahlung

BODY OF HD

The Harmonization Document consists of:

- IEC 764 (1983) edition 1; IEC/SC 29B, not appended

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This Harmonization Document was approved by CENELEC on 11 September 1984

The English and French versions of this HD are provided by the text of the IEC publication and the German version is the official translation of the IEC text.

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by or before 1985-03-01

to publish their new harmonized national standard

by or before 1986-03-01

to withdraw all conflicting national standards

by or before 1986-03-01.

Harmonized national standards are listed on the HD information sheet, which is available from the CENELEC National Committees or from the CENELEC General Secretariat.

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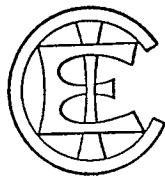
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SOUND TRANSMISSION USING INFRA-RED RADIATION

FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
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iTech STANDARD PREVIEW

PREFACE

This standard has been prepared by Sub-Committee 29B: Audio Engineering, of IEC Technical Committee No 29: Electroacoustics.

Work was started during the meetings held in Budapest in November 1977 for the sound transmission system for household use and, during the meeting held in Sydney in 1979, for the speech transmission interpreter system.

Drafts were discussed at the meeting held in Stockholm in 1980 and circulated to the National Committees under the Accelerated Procedure as a result of which, the drafts, Documents 29B(Central Office)96 and 97, were submitted to the National Committees for approval under the Six Months' Rule in July 1981.

The National Committees of the following countries voted in favour of publication of the two above-mentioned documents:

Australia	Netherlands
Belgium	Poland
Bulgaria	Romania
Canada	South Africa (Republic of)
Czechoslovakia	Spain
Denmark	Sweden
Egypt	Union of Soviet
France	Socialist Republics
Germany	United Kingdom
Korea (Republic of)	United States of America

SOUND TRANSMISSION USING INFRA-RED RADIATION

1. Scope

This standard is applicable to headphones with integrated infra-red detectors (receivers) for reproduction of the audio-signal. If the detectors for the infra-red radiation are not integrated with the headphone the standard is applicable to the detectors.

CHAPTER I: SOUND TRANSMISSION SYSTEMS FOR HOUSEHOLD USE USING INFRA-RED RADIATION

2. Object

Chapter I specifies the transmission parameters for cordless mono and stereo headphones with signal transmission of the audio signal in television and stereo household equipment by infra-red radiation, in order to ensure compatibility.

3. Wavelength of the infra-red radiation

The transmission shall use wavelengths between 900 nm and 950 nm.

4. Modulation

The signals have a dual modulation. The infra-red transmission is amplitude modulated with sub-carrier frequencies which are frequency modulated with the audio-signal.

5. Sub-carrier frequencies

- 5.1 The sub-carrier frequency (centre frequency) for monophonic sound shall be 95 kHz.
- 5.2 The sub-carrier frequencies (centre frequencies) for stereophonic sound shall be 95 kHz for the left-hand channel and 250 kHz for the right-hand channel.

6. Frequency deviation

The maximum frequency deviation shall be ± 50 kHz.

7. Pre-emphasis of the audio-signal

The pre-emphasis time constant of the transmitted audio-signal shall be 50 μ s.

8. Polarity

If there is a microphone in the system, an increasing sound pressure level at the front of the microphone shall produce a movement of the diaphragm of the headphone towards the ear.

CHAPTER II: SPEECH TRANSMISSION INTERPRETER SYSTEMS USING INFRA-RED RADIATION

9. Object

Chapter II specifies the transmission parameters for cordless transmissions for interpreter systems using infra-red radiation, in order to ensure compatibility.

10. Wavelength of the infra-red radiation

The transmissions shall use wavelengths between 900 nm and 950 nm.

11. Modulation

The infra-red radiation is amplitude modulated with sub-carrier frequencies which are frequency modulated by the audio-signal.

12. Sub-carrier frequencies

The sub-carrier frequencies (centre frequencies) are the following: 55, 95, 135, 175, 215, 255, 295, 335 and 375 kHz. To reduce to a minimum the problem of interference with other infra-red systems in the same room, it shall be possible to switch on and off individually each of the carrier frequencies.

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13. Frequency deviation

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The maximum frequency deviation shall be ± 7 kHz.

14. Pre-emphasis of the audio-signal

The pre-emphasis time constant of the transmitted audio-signal shall be 100 μ s.

15. Polarity

An increasing sound pressure level at the front of the microphone shall produce a movement of the diaphragm of the headphone towards the ear.
