SLOVENSKI STANDARD
SIST EN 60843-1:1999

01-april-1999

Helical-scan video tape cassette system using 8 mm magnetic tape - 8 mm Video -- Part 1: General specifications (IEC 60843-1:1993)

Helical-scan video tape cassette system using 8 mm magnetic tape - 8 mm Video -- Part 1: General specifications

Video-Bandkassettensystem mit Schrägspuraufzeichnung auf Magnetband 8 mm - 8 mm Video -- Teil 1: Allgemeine Festlegungen

Système de magnétoscope à cassette à balayage hélicoïdal utilisant la bande magnétique de 8 mm - Vidéo de 8 mm -- Partie 1: Généralités

Ta slovenski standard je istoveten z: **EN 60843-1:1994**

ICS:

33.160.40	Video sistemi	Video systems

SIST EN 60843-1:1999 **en**

EUROPEAN STANDARD EN 60843-1

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Descriptors: Electroacoustics, video recording, recording apparatus, video tape recorders, magnetic tapes, cassettes for magnetic tapes, interchangeability, electrical properties, mechanical properties, recording characteristics

ENGLISH VERSION

Helical-Scan video tape cassette system using 8 mm magnetic tape - 8 mm Video
Part 1: General specifications
(IEC 843-1:1993)

Système de magnétoscope à cassette à balayage hélicoïdal utilisant la bande magnétique de 8 mm - Vidéo 8 mm
Partie 1: Généralités
(CEI 843-1:1993)

Video-Bandkassettensystem mit Schrägspuraufzeichnung auf Magnetband 8 mm - Video 8
Teil 1: Allgemeine Festlegungen
(IEC 843-1:1993)

This European Standard was approved by CENELEC on 1994-03-08. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC

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

Central Secretariat: rue de Stassart 35, B-1050 Brussels

FOREWORD

The text of document 60B(CO)148, as prepared by Sub-Committee 60B: Video recording, of IEC Technical Committee 60: Recording, was submitted to the IEC-CENELEC parallel vote in March 1993.

The reference document was approved by CENELEC as EN 60843-1 on 8 March 1994.

This European Standard replaces HD 531 S1:1989.

The following dates were fixed:

- latest date of publication of an identical national standard	(dop)	1995-03-15
- latest date of withdrawal of conflicting national standards	(dow)	1995-03-15

For products which have complied with HD 531 S1:1989 before 1995-03-15, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-03-15.

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given only for information.
In this standard, annex A is informative and annex ZA is normative.

ENDORSEMENT NOTICE

The text of the International Standard IEC 843-1:1993 was approved by CENELEC as a European Standard without any modification.

ANNEX ZA (normative)

OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD WITH THE REFERENCES OF THE RELEVANT EUROPEAN PUBLICATIONS

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

NOTE : When the international publication has been modified by CENELEC common modifications, indicated by (mod), the relevant EN/HD applies.

IEC Publication	Date	Title	EN/HD	Date
843-2	1993	Helical-Scan video tape cassette system using 8 mm magnetic tape - 8 mm video Part 2: PCM multi-track audio systems	-	-
843-3	1993	Part 3: High-band specifications for Hi 8	EN 60843-3	1993
1105	1991	Reference tapes for video tape recorder systems	EN 61105	1993

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Deuxième édition
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Système de magnétoscope à cassette à balayage hélicoïdal utilisant la bande magnétique de 8 mm – Vidéo 8 mm

Partie 1:
Généralités

Helical-scan video tape cassette system using 8 mm magnetic tape – 8 mm video

Part 1:
General specifications

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HELICAL-SCAN VIDEO TAPE CASSETTE SYSTEM USING 8 mm MAGNETIC TAPE – 8 mm VIDEO

Part 1: General specifications

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

2) 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.

3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.

4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

International Standard IEC 843-1 has been prepared by sub-committee 60B: Video recording, of IEC technical committee 60: Recording.

This second edition cancels and replaces the first edition published in 1987 and constitutes a technical revision.

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

DIS	Report on Voting
60B(CO)148	60B(CO)166

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

IEC 843 consists of the following parts, under the general title: Helical-scan video tape cassette system using 8 mm magnetic tape – 8 mm video

- Part 1: General specifications
- Part 2: PCM multi-track audio system
- Part 3: High-band specifications for 8 mm video – Hi 8

Annex A is for information only.

HELICAL-SCAN VIDEO TAPE CASSETTE SYSTEM USING 8 mm MAGNETIC TAPE – 8 mm VIDEO

Part 1: General specifications

SECTION 1: GENERAL

1.1 Scope and object

This part of IEC 843 applies to magnetic video recording and/or playback with 8 mm tape cassettes on two-head helical-scan video cassette recorders, suitable for the recording and/or playback of monochrome as well as colour television signals.

The object of this part is to define the electrical and mechanical characteristics of equipment which will provide for interchangeability of recorded cassettes. This will include the ability to reproduce recordings made on both types of magnetic tapes defined in section 2. The requirements given are related to 525 line – 60 field or 625 line – 50 field systems, NTSC and PAL respectively.

1.2 Normative references

The following normative document contains provisions which, though reference in this text, constitute provisions of this part of IEC 843. At the time of publication, the edition indicated was valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 843 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 843-2: 1993, *Helical-scan video tape cassette system using 8 mm magnetic tape – 8 mm video – Part 2: PCM multi-track audio systems*

IEC 843-3: 1993, *Helical-scan video tape cassette system using 8 mm magnetic tape – 8 mm video – Part 3: High-band specifications for 8 mm video – Hi 8*

IEC 1105: 1991, *Reference tapes for video tape recorder systems*

1.3 Environmental conditions

Tests and measurements made on the system to check the requirements of this standard shall be carried out under the following conditions:

Temperature:	20 °C ± 1°C
Relative humidity:	(50 ± 2) %
Air pressure:	86 kPa to 106 kPa
Conditioning before testing:	24 h

SECTION 2: VIDEO TAPE

2.1 Types of magnetic tape and reference tape

The 8 mm video tape exists in two types: type A and type B.

Type A is a metal powder tape or its equivalent, the characteristics of which are referred to as type A reference (see annex A).

Type B is a metal evaporated tape or its equivalent, the characteristics of which are referred to as type B reference (see annex A).

The performance of reference tapes is specified in IEC 1105.

The reference tapes are intended as reference only for video and audio characteristics specified in 2.4.

2.2 Physical properties of the tape

2.2.1 *Magnetic tape width*

The width of the magnetic tape shall be 8,000 mm ± 0,010 mm.

2.2.2 *Magnetic tape width fluctuation*

The fluctuation of the magnetic tape width shall be no more than 0,006 mm peak-to-peak.

2.2.3 *Magnetic tape thickness*

The thickness of the magnetic tape shall be:

13,0 µm ± 1,0 µm

(10,0 µm ± 0,8 µm) (under consideration)

2.2.4 *Transparency of the magnetic tape*

The transparency of the magnetic tape for 800 nm – 900 nm wavelength light shall be less than 5 %.

2.3 Magnetic properties of the tape

The magnetic properties of the magnetic tape, such as coercivity, remanence and magnetic orientation, are not specified.

The compatibility of tapes of the same type shall be maintained by the characteristics of the tape specified in 2.4.