SLOVENSKI STANDARD

SIST EN 61834-9:2003

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Recording - Helical-scan digital video cassette recording system using 6,35 mm magnetic tape for consumer use (525-60, 625-50, 1125-60 and 1250-50 systems) - Part 9: DVB format (IEC 61834-9:2001)

Recording - Helical-scan digital video cassette recording system using 6,35 mm magnetic tape for consumer use (525-60, 625-50, 1125-60 and 1250-50 systems) -- Part 9: DVB format

Aufzeichnungstechnik - Videokassettensystem mit digitaler Schrägspuraufzeichnung auf Magnetband 6,35 mm für den Heimgebrauch (Systeme 525-60, 625-50, 1125-60, 1250-50) -- Teil 9: DVB-Format

Enregistrement - Système de magnétoscope numérique à cassette à balayage hélicoïdal utilisant la bande magnétique de 6,35 mm, destiné au grand public (systèmes 525-60, 625-50, 1125-60 et 1250-50) -- Partie 9: Format DVB

Ta slovenski standard je istoveten z: **EN 61834-9:2001**

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EUROPEAN STANDARD **EN 61834-9**

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English version

Recording - Helical-scan digital video cassette recording system using 6,35 mm magnetic tape for consumer use (525-60, 625-50, 1125-60 and 1250-50 systems) Part 9: DVB format

(IEC 61834-9:2001)

Enregistrement –
Système de magnétoscope numérique
à cassette à balayage hélicoïdal utilisant
la bande magnétique de 6,35 mm,
destiné au grand public (systèmes
525-60, 625-50, 1125-60 et 1250-50)
Partie 9: Format DVB
(CEI 61834-9:2001)

Aufzeichnungstechnik -
Videokassettensystem mit digitaler
Schrägspuraufzeichnung auf Magnetband
6,35 mm für den Heimgebrauch (Systeme
525-60, 625-50, 1125-60, 1250-50)
Teil 9: DVB-Format
(IEC 61834-9:2001)

This European Standard was approved by CENELEC on 2001-05-01. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

Ref. No. EN 61834-9:2001 E

Foreword

The text of document 100B/283/FDIS, future edition 1 of IEC 61834-9, prepared by SC 100B, Audio, video and multimedia information storage systems, of IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61834-9 on 2001-05-01.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2002-02-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2004-05-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61834-9:2001was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

Normative references to international publications with their corresponding 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 (including amendments).

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

Publication	Year	Title	EN/HD	Year
IEC 61834-1	1998	Recording - Helical-scan digital video cassette recording system using 6,35 mm magnetic tape for consumer use (525-60, 625-50, 1125-60 and 1250-50 systems) Part 1: General specifications	EN 61834-1	1998
A1	2001		A1	2001
IEC 61834-2	1998	Part 2: SD format for 525-60 and 625-50 systems	EN 61834-2	1998
IEC 61834-4	1998	Part 4: Pack header table and contents	EN 61834-4	1998
IEC 61834-6	- [1]	Part 6: SDL format	EN 61834-6	2000 [2]
IEC 61883-1	1998	Consumer audio/video equipment - Digital interface Part 1: General	EN 61883-1	1998
IEC 61883-4	1998	Part 4: MPEG2-TS data transmission	EN 61883-4	1998
ETS 300 468	1998	Specification for Service Information (SI) in DVB systems	-	-
EBU SPB 492	1992	Teletext Specifications	-	-

1) undated reference.

2) valid edition at date of issue.

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Première édition
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Enregistrement – Système de magnétoscope numérique à cassette à balayage hélicoïdal utilisant la bande magnétique de 6,35 mm, destiné au grand public (systèmes 525-60, 625-50, 1125-60 et 1250-50) –

Partie 9: Format DVB

Recording – Helical-scan digital video cassette recording system using 6,35 mm magnetic tape for consumer use (525-60, 625-50, 1125-60, 1250-50 systems) –

Part 9: DVB format

International Electrotechnical Commission 3, rue de Varembé Geneva, Switzerland
Telefax: +41 22 919 0300 e-mail: inmail@iec.ch IEC web site http://www.iec.ch

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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PRICE CODE X

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HELICAL-SCAN DIGITAL VIDEO CASSETTE RECORDING SYSTEM USING 6,35 mm MAGNETIC TAPE FOR CONSUMER USE (525-60, 625-50, 1125-60 and 1250-50 systems) –

Part 9: DVB format

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 co-operation 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 express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.

3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, 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.

5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61834-9 has been prepared by subcommittee 100B: Audio, video and multimedia information storage 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
100B/283/FDIS	100B/289/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 3.

IEC 61834 consists of the following parts, under the general title *Recording – Helical-scan digital video cassette recording system using 6,35 mm magnetic tape for consumer use (525-60, 625-50, 1125-60 and 1250-50 systems)*

- Part 1: General specifications;
- Part 2: SD format for 525-60 and 625-50 systems;
- Part 3: HD format for 1125-60 and 1250-50 systems;
- Part 4: Pack header table and its contents;
- Part 5: The character information system;
- Part 6: SDL format;
- Part 7: EDTV2 format;
- Part 8: PALplus format;
- Part 9: DVB format;
- Part 10: DTV format.

This standard is part 9 of IEC 61834 and describes the specifications for an extended application of the SD format involving the coding and recording of the DVB bit stream.

Part 1 describes specifications which are common to all versions of the helical-scan digital video cassette recording system, including cassettes, helical recording method, modulation method, magnetization, and basic system data.

Part 2 describes specifications for 525-60 and 625-50 systems not included in part 1.

Part 3 describes specifications for 1125-60 and 1250-50 systems not included in parts 1 and 2.

Part 4 describes the pack header table and the contents of packs which are applicable to all versions of the helical-scan digital video cassette system.

Part 5 describes the character information system which is applicable to all versions of the helical-scan digital video cassette system.

Part 6 describes the specifications for a variant of the SD format using twice the normal compression ratio, which are not included in part 2.

Part 7 describes the specifications for an extended implementation of the SD format capable of recording an EDTV2 signal.

Part 8 describes the specifications for an extended implementation of the SD format capable of recording a PALplus TV signal.

Part 10 describes the specifications for an extended implementation of the SD format capable of coding and recording a DTV bit stream.

Those interested in the manufacture of DVB digital video cassette recording systems are advised to refer to parts 1, 2, 4, 5, and 9.

The committee has decided that the contents of this publication will remain unchanged until 2008. At this date, the publication will be

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

RECORDING –

HELICAL-SCAN DIGITAL VIDEO CASSETTE RECORDING SYSTEM USING 6,35 mm MAGNETIC TAPE FOR CONSUMER USE (525-60, 625-50, 1125-60 and 1250-50 systems) –

Part 9: DVB format

1 General

1.1 Scope

This part of IEC 61834 specifies the content, format and recording method for the data blocks forming the helical records on the tape containing audio, video and system data. This part describes the specifications for the recording of single DVB programmes. The DVB data is delivered to the digital video cassette recorder via a digital interface or by a built-in tuner (IRD). The DVB data consist of an MPEG2 transport stream containing one or more programmes.

In DVB, the MPEG2 MP@ML is specified to encode the video signal. The maximum bit rate for the video signal is 15 Mbps. One programme may consist of one video bit stream or several audio bit streams and data bit streams.

Due to the varied bit rates of single DVB programmes, several recording modes are specified in order to make efficient use of the storage capacity of the digital video cassette recorder.

In addition to the normal play data stream of DVB recording, one or two special trick play data streams may optionally be generated and recorded in the video area.

In this part 9, the data structure of a track is defined by APT = 000b which consists of four areas as described in 4.3.2 of IEC 61834-1 and AP1 = AP3 = 000b. The data structure of MIC is the same as in clause 10 of IEC 61834-2.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61834. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61834 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 61834-1:1998, *Recording – Helical-scan digital video cassette recording system using 6,35 mm magnetic tape for consumer use (525-60, 625-50, 1125-60 and 1250-50 systems) – Part 1: General specifications*
Amendment 1

IEC 61834-2:1998, *Recording – Helical-scan digital video cassette recording system using 6,35 mm magnetic tape for consumer use (525-60, 625-50, 1125-60 and 1250-50 systems) – Part 2: SD format for 525-60 and 625-50 systems*

IEC 61834-4:1998, *Recording – Helical-scan digital video cassette recording system using 6,35 mm magnetic tape for consumer use (525-60, 625-50, 1125-60 and 1250-50 systems) – Part 4: Pack header table and contents*

IEC 61834-6, *Recording – Helical-scan digital video cassette recording system using 6,35 mm magnetic tape for consumer use (525-60, 625-50, 1125-60 and 1250-50 systems) – Part 6: SDL format*

IEC 61883-1:1998, *Consumer audio/video equipment – Digital interface – Part 1: General*

IEC 61883-4:1998, *Consumer audio/video equipment – Digital interface – Part 4: MPEG2-TS data transmission*

ETS 300 468:1998, *Specification for Service Information (SI) in DVB systems*

EBU SBP 492:1992, *Teletext specifications*

1.3 Abbreviations

For the purposes of this part of IEC 61834, the following abbreviations apply.

AAUX	Audio auxiliary data
BCH code	Base-Chaudhuri-Hocquenghem code, one of the well-known error correction codes
CGMS	Copy Generation Management System
DCT	Discrete cosine transform
DTV	Digital Television (MPEG transmission in USA) (differs from ATV)
DVB	Digital Video Broadcast (used for organization and the signal)
DVCR	Digital Video Cassette Recorder
ECC	Error Correction Code
ECC1	Inner error correction (within the SB)
ECC2	Outer error correction (within one track)
ECC3	Extra outer error correction (several tracks)
EIT	Event Information Table
FEC	Forward Error Correction (used in MPEG transmission)
GF	Galois field
IRD	Integrated Receiver Decoder
MIC	Memory in Cassette
MP@ML	Main Profile at Main Level
MPEG	Motion Pictures Expert Group
NP	Normal play