
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 3: HD format for 1125-60 and 1250-50 systems (IEC 61834-3:1999)

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 3: HD format for 1125-60 and 1250-50 systems

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Aufzeichnung - Videokassettensystem mit digitaler Schrägspuraufzeichnung auf Magnetband 6,35 mm für den Heimgebrauch (Systeme 525-60, 625-50, 1125-60 und 1250-50) -- Teil 3: HD-Format für die Systeme 1125-60 und 1250-50

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Enregistrement - Systèmes de magnétoscopes numériques à cassette à balayage hélicoïdal sur bande magnétique de 6,35 mm pour usage grand public (systèmes 525-60, 625-50, 1125-60 et 1250-50) -- Partie 3: Format HD pour les systèmes 1125-60 et 1250-50

Ta slovenski standard je istoveten z: EN 61834-3:2000

ICS:

33.160.40 Video sistemi Video systems

SIST EN 61834-3:2001 **en**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61834-3

March 2000

ICS 33.160.40

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 3: HD format for 1125-60 and 1250-50 systems
(IEC 61834-3:1999)**

Enregistrement - Systèmes de
magnétoscopes numériques à cassette à
balayage hélicoïdal sur bande
magnétique de 6,35 mm pour usage
grand public (systèmes 525-60,
625-50, 1125-60 et 1250-50)
Partie 3: Format HD pour les systèmes
1125-60 et 1250-50
(CEI 61834-3:1999)

Aufzeichnung - Videokassettsystem
mit digitaler Schrägspuraufzeichnung
auf Magnetband 6,35 mm für den
Heimgebrauch (Systeme 525-60,
625-50, 1125-60 und 1250-50)
Teil 3: HD-Format für die Systeme
1125-60 und 1250-50
(IEC 61834-3:1999)

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<https://standards.iteh.ai/catalog/standards/sist/5b61cb4c-848a-46fd-bae6-478059656c9e/sist-en-61834-3-2001>

This European Standard was approved by CENELEC on 2000-01-01. 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

Foreword

The text of document 100B/233/FDIS, future edition 1 of IEC 61834-3, prepared by SC 100B "Audio, video and multimedia information storage systems" des 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 61834-3 on 2000-01-01.

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) 2000-10-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2003-01-01

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annexes A and ZA are normative and annex B is informative.
Annex ZA has been added by CENELEC.

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The text of the International Standard IEC 61834-3:1999 was approved by CENELEC as a European Standard without any modification.

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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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
ITU-R Recommendation BT.709-3	1998	Parameter values for the HDTV standards for production and international programme exchange	-	-
ITU-R Recommendation BS.775-1	1993	Multi-channel stereophonic sound systems with and without accompanying picture	-	-

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

61834-3

Première édition
First edition
1999-11

Enregistrement – Systèmes de magnétoscopes numériques à cassette à balayage hélicoïdal sur bande magnétique de 6,35 mm pour usage grand public (systèmes 525-60, 625-50, 1125-60 et 1250-50) –

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**Partie 3:
Format HD pour systèmes 1125-60 et 1250-50**

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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 3:
HD format for 1125-60 and 1250-50 systems**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE **XB**

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CONTENTS

	Page
FOREWORD	11
Clause	
1 General.....	15
1.1 Scope	15
1.2 Normative references.....	15
1.3 Definitions, symbols and abbreviations	17
1.4 Environment and test conditions	17
1.5 Reference tape	17
1.6 Calibration tape.....	17
1.6.1 Record locations and dimensions	17
1.6.2 Calibration signals.....	17
1.6.3 Purchase.....	17
2 Helical recordings	17
2.1 Tape speed.....	17
2.2 Record location and dimensions	17
2.2.1 Scanner example.....	19
3 Programme track data arrangement	19
3.1 Introduction.....	19
3.2 Labelling convention.....	19
3.3 Audio sector.....	19
3.4 Video sector.....	19
3.5 Subcode sector	19
4 Audio interface	21
5 Video interface	21
6 Audio signal processing.....	21
6.1 Introduction.....	21
6.2 Error correction code.....	21
6.3 Randomization pattern	21
6.4 Audio encoding	21
6.5 Audio channel allocation.....	21
6.5.1 Audio block	21
6.5.2 Audio channel mode.....	21
6.5.3 Channel allocation rule.....	23
6.6 Frame structure	25
6.6.1 Relative audio-video timing.....	25
6.6.2 Audio frame processing.....	25
6.7 Shuffling method.....	25
6.7.1 48k, 44,1k, 32k modes	27
6.7.2 32k-2ch modes.....	29
6.8 Audio auxiliary data (AAUX)	29
6.9 Invalid recording	29
7 Video signal processing.....	29
7.1 Introduction.....	29
7.2 Error correction code.....	29
7.3 Randomization pattern	31

7.4	Video structure.....	31
7.4.1	Sampling structure	31
7.4.2	DCT block	33
7.4.3	Macro block	33
7.4.4	Super block.....	35
7.4.5	Definition of super block number, macro block number and value of the pixel	35
7.4.6	Definition of video segment and compressed macro block	37
7.5	DCT processing	37
7.6	Quantization.....	37
7.6.1	Introduction	37
7.6.2	Bit assignment for quantization	39
7.6.3	Class number.....	39
7.6.4	Initial scaling	39
7.6.5	Area number	39
7.6.6	Quantization step	39
7.7	Variable length coding (VLC).....	41
7.8	Arrangement of a compressed macro block.....	41
7.8.1	STA (status of the compressed macro block).....	41
7.8.2	QNO (quantization number).....	41
7.8.3	DC	41
7.8.4	AC	41
7.9	Arrangement of a video segment.....	41
7.9.1	Arrangement algorithm of a video segment.....	41
7.9.2	Video error code processing.....	45
7.10	Data-sync block and compressed macro block	45
7.11	Video auxiliary data (VAUX)	45
7.12	Invalid recording	47
8	Subcode signal processing.....	47
8.1	The recording periods of TAG ID.....	47
8.2	The writing method of the optional area	47
8.3	The rewriting periods of TAG ID	47
9	System data	47
9.1	AAUX.....	47
9.2	VAUX.....	51
9.3	Subcode	51
9.4	MIC.....	53
10	Data structure for digital interface.....	53
10.1	Introduction.....	53
10.2	Data structure	53
10.3	DIF sequence.....	53
10.4	DIF block	53
10.4.1	ID part.....	53
10.4.2	Data part.....	55
10.5	Frame period	57
10.6	Playback speed.....	59

Annex A (normative) 20 bits audio for professional use	115
A.1 Channel allocation.....	115
A.2 Encoding mode	115
A.3 Audio error code	115
A.4 Shuffling method	115
 Annex B (informative) Manufacturers	125
B.1 Reference tape	125
B.2 Calibration tape.....	125
B.3 Purchase	125
 Figure 1 Sector arrangement on helical track (1125-60 and 1250-50 systems).....	61
Figure 2 – 1125-60 system	61
Figure 3 – 1250-50 system	63
Figure 4 – Transmitting samples for 1125-60 system.....	75
Figure 5 – Transmitting samples for 1250-50 system.....	77
Figure 6 – DCT block and the pixel coordinates	77
Figure 7 – DCT block arrangement	79
Figure 8 – Macro block and DCT block order	79
Figure 9 – Arrangement of macro blocks for 1125-60 system	81
Figure 10 – Super blocks and macro blocks in a frame on TV screen for 1125-60 system.....	83
Figure 11 – Super blocks and macro blocks in a frame on TV screen for 1250-50 system.....	85
Figure 12 – Macro block order in a super block.....	87
Figure 13 – Area number	87
Figure 14 – The arrangement of a compressed macro block.....	89
Figure 15 – The arrangement of a video segment after bit-rate reduction	91
Figure 16 – The relation between the compressed macro block number and the data-sync block.....	93
Figure 17 – Main area and optional area (1125-60 system)	95
Figure 18 – Main area and optional area (1250-50 system)	97
Figure 19 – Data structure for transmission.....	101
Figure 20 – Transmission order of DIF blocks in a DIF sequence	103
Figure 21 – ID data in a DIF block.....	105
Figure 22 – Data in the header section.....	105
Figure A.1 –Sample to data bytes conversion for 20 bits	123
 Table 1 – Record location and dimensions (1125-60 system, 1250-50 system)	59
Table 2 – Sector location from SSA (1125-60 system, 1250-50 system)	59
Table 3 – Scanner example (1125-60 system, 1250-50 system)	59
Table 4 – Sequence number (1125-60 and 1250-50 systems)	63
Table 5 – Track pair number (1125-60 system)	63
Table 6 – Track pair number (1250-50 system)	65
Table 7 – Construction of an audio block	65
Table 8 – Basic channel allocation rule in multi-stereo audio	67
Table 9 – Channel allocation rule for lumped audio	69

Table 10 – The number of audio samples per frame (unlocked mode)	71
Table 11 – The allowance range of the accumulated difference value between the numbers of audio samples per frame in synchronous channels	71
Table 12 – The number of audio samples per frame (locked mode)	71
Table 13 – The construction of video signal sampling (12:4:4)	73
Table 14 – An example of the classification for reference	87
Table 15 – Quantization step	89
Table 16 – AAUX data of the main area	99
Table 17 – VAUX data of the main area	99
Table 18 – TIA data in the header section	107
Table 19 – DIF blocks and subcode sync blocks	107
Table 20 – DIF blocks and VAUX data-sync blocks	109
Table 21 – DIF blocks and audio data-sync blocks	111
Table 22 – DIF blocks and compressed macro blocks	113
Table A.1 – Basic channel allocation rule	123

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SIST EN 61834-3:2001

<https://standards.iteh.ai/catalog/standards/sist/5b61cb4c-848a-46fd-bae6-478059656c9e/sist-en-61834-3-2001>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**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 3: HD format for 1125-60 and 1250-50 systems

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.
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- 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.
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International Standard IEC 61834-3 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.

This bilingual version (2000-03) replaces the English version.

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

FDIS	Report on voting
100B/233/FDIS	100B/245/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: The pack header table and the contents;
- Part 5: The character information system.

The basic principles and rules of this part 3 are based on the set of specifications to be adopted by the HD Digital VCR Conference.

This part 3 describes the helical-scan digital video cassette recording system using 6,35 mm magnetic tape for consumer use.

Part 1 describes the common specifications for the helical-scan digital video cassette recording system using 6,35 mm magnetic tape.

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

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

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

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For manufacturing SD digital video cassette recording systems, parts 1, 2, 4 and 5 are referred to.

For manufacturing HD digital video cassette recording systems, parts 1, 2, 3, 4 and 5 are referred to.

Annex A forms an integral part of this standard.

Annex B is for information only.

The committee has decided that the contents of this publication will remain unchanged until 2004. 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 3: HD format for 1125-60 and 1250-50 systems

1 General

1.1 Scope

The main object of this part of IEC 61834 is to establish basic principles applicable to the next generation of digital video cassette recording systems for consumer use for the interest of both users and manufacturers.

This part of IEC 61834 specifies the content, format and recording method of the data blocks forming the helical records on the tape containing audio, video, and system data. It describes the specifications for the 1125-line system with a frame frequency of 30,00 Hz (hereinafter referred to as the "1125-60 system") and the 1250-line system with a frame frequency of 25,00 Hz (hereinafter referred to as the "1250-50 system") which are not included in parts 1 and 2. One video channel and four independent audio channels are recorded in the digital format. Each of these channels is designed to be capable of independent editing. The video channel records and reproduces a component television signal in the 1125-60 and 1250-50 systems.

In part 3, the data structure of a track is defined by $APT = 000b$ which consists of four areas as described in 4.3.2 in part 1 and $AP1 = AP2 = AP3 = 000b$. The data structure of MIC is the same as clause 10 in 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 61834-2:1998, *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*

ITU-R Recommendation BT.709-3:1998, *Parameter values for the HDTV standards for production and international programme exchange*

ITU-R Recommendation BS.775-1:1993, *Multi-channel stereophonic sound systems with and without accompanying picture*

1.3 Definitions, symbols and abbreviations

None

1.4 Environment and test 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) %;
- Barometric pressure: from 86 kPa to 106 kPa;
- Tape conditioning: not less than 24 h.

1.5 Reference tape

Blank tape to be used for calibration recordings may be purchased from the manufacturers given in annex B.

1.6 Calibration tape

Manufacturers of video tape recorders designed for this format specification may sell calibration tapes meeting the following requirements.

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1.6.1 Record locations and dimensions

Tolerances shown in tables 1 and 2 should be reduced by 50 %.

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1.6.2 Calibration signals

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Test signals should be recorded on the calibration tapes:

- Video: 100 % colour bars;
- Audio: 1 kHz tone at -20 dB below full level.

1.6.3 Purchase

The calibration tape may be purchased from the manufacturers given in annex B.

2 Helical recordings

2.1 Tape speed

The tape speed is 37,594 mm/s for both 1125-60 and 1250-50 systems.

The tape speed tolerance is ±0,5 %.

2.2 Record location and dimensions

Record location and dimensions for continuous recording shall be as specified in figure 1 of IEC 61834-2. Each value is described in table 1. For recording, helical tracks shall be contained within the tolerance specified in table 1.