IEC 61834-11

Edition 1.0 2008-02

INTERNATIONAL STANDARD

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 11: HDV format for 1080i and 720p systems

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

PRICE CODE XE

ICS 33.160.40

ISBN 2-8318-9611-8

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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 11: HDV[1] format for 1080i and 720p systems

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1 HDV is the trademark of Sony Corporation and Victor Company of Japan, Limited (JVC).

International Standard IEC 61834-11 has been prepared by TA 7: Moderate data rate storage media, equipment and systems, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

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

CDV	Report on voting
100/1229/CDV	100/1306/RVC

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 list of all the parts of the IEC 61834 series, 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)*, can be found on the IEC web site.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under http://webstore.iec.ch in the date related to the specific publication. At this date, the publication will be

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- withdrawn;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

A bilingual version of this publication may be issued at a later date.

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 11: HDV[2] format for 1080i and 720p systems

1 Scope

This part of IEC 61834 specifies the content, format, and recording method of data blocks containing video, audio, and system data on the helical scan digital video cassettes using 6,35 mm tape as defined in IEC 61834-1 for recording MPEG-2 streaming HD signals.

The MPEG-2 streaming HD signals defined in this standard have the following modes.

The HD1 mode is designed for the following systems:

- 525-line progressive with a frame frequency of 59,94 Hz (hereinafter referred to as 480p/60 system)
- 625-line progressive with a frame frequency of 50,00 Hz (hereinafter referred to as 576p/50 system)
- 525-line interlace with a field frequency of 59,94 Hz (hereinafter referred to as 480i/60 system)
- 625-line interlace with a field frequency of 50,00 Hz (hereinafter referred to as 576i/50 system)
- 525-line progressive with a frame frequency of 29,97 Hz (hereinafter referred to as 480p/30 system)
- 625-line progressive with a frame frequency of 25,00 Hz (hereinafter referred to as 576p/25 system)
- 750-line progressive with a frame frequency of 29,97 Hz (hereinafter referred to as 720p/30 system)
- 750-line progressive with a frame frequency of 25,00 Hz (hereinafter referred to as 720p/25 system)
- 750-line progressive with a frame frequency of 59,94 Hz (hereinafter referred to as 720p/60 system)
- 750-line progressive with a frame frequency of 50,00 Hz (hereinafter referred to as 720p/50 system)

The main specifications shall be as defined in IEC 61834-9 and IEC 61834-10.. Other information, such as details about MPEG-2 stream descriptors, trick play data, system data, etc., are defined in Clause 7.

The HD2 mode is designed for the following systems:

- 1125-line interlace with a field frequency of 59,94 Hz (hereinafter referred to as 1080i/60 system)

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2 HDV is the trademark of Sony Corporation and Victor Company of Japan, Limited (JVC).

- 1125-line interlace with a field frequency of 50,00 Hz (hereinafter referred to as 1080i/50 system)

The main specifications for helical recordings and the program track data format shall be as defined in Clauses 5 and 6 of this standard. Other information, such as details about main data, PES data, search data, subcode data, MPEG-2 stream descriptors, etc., are defined in Clause 8.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61834-1, *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*

IEC 61834-2, *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, *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 61834-9, *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 61834-10, *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 10: DTV format*

ISO/IEC 11172-3, *Coding of moving pictures and associated audio for digital storage – Part 3: Audio*

ISO/IEC 13818-1, *Information technology – Generic coding of moving pictures and associated audio information: Systems*

ISO/IEC 13818-2, *Information technology – Generic coding of moving pictures and associated audio information: Video*

ISO/IEC 13818-3, *Information technology – Generic coding of moving pictures and associated audio information – Part 3: Audio*

ISO/IEC 13818-9, *Information technology – Generic coding of moving pictures and associated audio information – Part 9: Extension for real time interface for systems decoder*

ITU-R Recommendation BT.709-5, *Parameter values for the HDTV standards for production and international programme exchange*

ETSI EN 300 468, V1.5.1:2003, *Digital Video Broadcasting (DVB); Specification for Service Information (SI) in DVB Systems*

ARIB STD-B10, *Service Information for Digital Broadcasting System*

ARIB STD-B20, *Transmission System for Digital Satellite Broadcasting*