

# INTERNATIONAL STANDARD

# IEC 62071-2

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## Helical-scan compressed digital video cassette system using 6,35 mm magnetic tape – Format D-7 –

### Part 2: Compression format

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## CONTENTS

FOREWORD.....	5
1 Scope.....	7
2 Normative references.....	7
3 Abbreviations and acronyms .....	7
4 Interface.....	8
4.1 Introduction .....	8
4.2 Data structure.....	9
4.3 Header section .....	12
4.4 Subcode section .....	15
4.5 VAUX section .....	20
4.6 Audio section.....	24
4.7 Video section.....	30
5 Video compression .....	32
5.1 Video structure .....	32
5.2 DCT processing.....	48
5.3 Quantization .....	51
5.4 Variable length coding (VLC) .....	53
5.5 The arrangement of a compressed macro block.....	56
5.6 The arrangement of a video segment.....	59
Annex A (informative) Differences between IEC 61834 and IEC 62071-2.....	64
Annex B (normative) Digital filter for sampling-rate conversion from 4:2:2 to 4:1:1 colour difference signals .....	65
Annex C (informative) Block diagram of D-7 recorder .....	66
Bibliography.....	67
Figure 1 – Block diagram on the digital interface.....	8
Figure 2 – Data structure of one video frame for 50 Mb/s structure .....	10
Figure 3 – Data structure of one video frame for 25 Mb/s structure .....	10
Figure 4 – Data structure of a DIF sequence.....	11
Figure 5 – Data in the subcode section.....	16
Figure 6 – Pack in SSYB .....	17
Figure 7 – Data in the VAUX section.....	21
Figure 8 – Data in the audio section .....	24
Figure 9 – conversion of audio sample to audio data bytes .....	26
Figure 10 – Arrangement of AAUX packs in audio auxiliary data .....	26
Figure 11 – Transmitting samples of 525/60 system for 4:2:2 compression .....	34
Figure 12 – Transmitting samples of 625/50 system for 4:2:2 compression .....	35
Figure 13 – Transmitting samples of 525/60 system for 4:1:1 compression .....	36
Figure 14 – Transmitting samples of 625/50 system for 4:1:1 compression .....	37
Figure 15 – DCT block and the pixel coordinates .....	38

Figure 16 – The rightmost DCT block in colour difference signal for 4:1:1 compression mode .....	38
Figure 17 – DCT block arrangement for 4:2:2 compression.....	39
Figure 18 – DCT block arrangement for 4:1:1 compression.....	40
Figure 19 – Macro block and DCT blocks for 4:2:2 compression .....	40
Figure 20 – Macro block and DCT blocks for 4:1:1 compression .....	40
Figure 21 – Super blocks and macro blocks in one TV frame for 525/60 system for 4:2:2 compression.....	42
Figure 22 – Super blocks and macro blocks in one TV frame for 525/60 system for 4:1:1 compression.....	43
Figure 23 – Super blocks and macro blocks in one TV frame for 625/50 system for 4:2:2 compression.....	44
Figure 24 – Super blocks and macro blocks in one TV frame for 625/50 system for 4:1:1 compression.....	45
Figure 25 – Macro block order in a super block for 4:2:2 compression .....	47
Figure 26 – Macro block order in a super block for 4:1:1 compression .....	47
Figure 27 – The output order of a weighted DCT block .....	50
Figure 28 – Area numbers .....	52
Figure 29 – Arrangement of a compressed macro block for 4:2:2 compression .....	56
Figure 30 – The arrangement of a compressed macro block for 4:1:1 compression.....	57
Figure 31 – The arrangement of a video segment after the bit rate reduction for 4:2:2 compression .....	62
Figure 32 – The arrangement of a video segment after the bit rate reduction for 4:1:1 compression .....	63
Figure 33 – The video error code.....	63
Figure B.1 – Template for insertion loss frequency characteristics .....	65
Figure B.2 – Passband ripple tolerance .....	65
Figure C.1 – Block diagram of D-7 recorder.....	66
Table 1 – ID data of a DIF block .....	12
Table 2 – Section type.....	13
Table 3 – DIF sequence number (525/60 system) .....	13
Table 4 – DIF sequence number (625/50 system) .....	14
Table 5 – DIF block number .....	14
Table 6 – Data (payload) in the Header DIF block.....	15
Table 7 – SSYB ID .....	17
Table 8 – Pack header table.....	18
Table 9 – Mapping of packet in SSYB data .....	18
Table 10 – Mapping of time code pack .....	19
Table 11 – Mapping of binary group pack .....	20
Table 12 – Mapping of VAUX pack in a DIF sequence .....	21
Table 13 – Mapping of VAUX source pack.....	21
Table 14 – Mapping of VAUX source control pack.....	23
Table 15 – Mapping of AAUX pack in a DIF sequence .....	26
Table 16 – Mapping of AAUX Source pack .....	27

Table 17 – Mapping of AAUX Source Control pack .....	28
Table 18 – Video DIF blocks and compressed macro blocks for 50 Mb/s structure – 4:2:2 compression.....	31
Table 19 – Video DIF blocks and compressed macro block for 25 Mb/s structure – 4:1:1 compression .....	32
Table 20 – Construction of video signal sampling (4:2:2) .....	33
Table 21 – Class number and the DCT block .....	51
Table 22 – An example of the Classification for reference.....	51
Table 23 – Quantization step.....	53
Table 24 – Length of codewords.....	54
Table 25 – Codewords for variable length coding.....	55
Table 26 – Definition of STA.....	57
Table 27 – Codewords of the QNO .....	58
Table A.1 – Abstract of differences between IEC 61834 and IEC 62071-2.....	64

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HELICAL-SCAN COMPRESSED DIGITAL VIDEO CASSETTE SYSTEM  
USING 6,35 mm MAGNETIC TAPE – FORMAT D-7 –**
**Part 2: Compression format**

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International Standard IEC 62071-2 has been prepared by technical area 6: Higher data rate storage media, data structures and equipment 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
100/901/CDV	100/985/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.

IEC 62071 consists of the following parts, under the general title *Helical-scan compressed digital video cassette system using 6,35 mm magnetic tape – Format D-7*:

Part 1: VTR specifications

Part 2: Compression format

Part 3: Data stream format

This part 2 describes the specifications for encoding process and data format for 525i and 625i systems.

Part 1 describes the VTR specifications which are tape, magnetization, helical recording, modulation method and basic system data for video compressed data.

Part 3 describes the specifications for transmission of DV-based compressed video and audio data stream over 270Mb/s and 360 Mb/s serial digital interface.

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 data 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.

# HELICAL-SCAN COMPRESSED DIGITAL VIDEO CASSETTE SYSTEM USING 6,35 mm MAGNETIC TAPE – FORMAT D-7 –

## Part 2: Compression format

### 1 Scope

This part of IEC 62071 defines the DV-based data structure for the interface of digital audio, subcode data and compressed video with the following parameters:

525/60 system – 4:1:1 image sampling structure, 25 Mb/s data rate;

525/60 system – 4:2:2 image sampling structure, 50 Mb/s data rate;

625/50 system – 4:1:1 image sampling structure, 25 Mb/s data rate;

625/50 system – 4:2:2 image sampling structure, 50 Mb/s data rate.

This standard does not define the DV compliant data structure for interface, of digital audio, subcode data and compressed video with the following parameters:

625/50 system – 4:2:0 image sampling structure, 25 Mb/s data rate

The compression algorithm and the DIF structure conform to the DV data structure as defined in IEC 61834. Differences between the DV-based data structure defined in this standard and IEC 61834 are shown in Annex A.

### 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.

ITU-R BT.601-5: 1995, *Studio encoding parameters of digital television for standard 4:3 and wide-screen 16:9 aspect ratios*

AES3-2003: *Serial transmission format for two-channel linearly represented digital audio data*

SMPTE 12M: 1999, *Television, Audio and Film – Time and Control Code*