



# SLOVENSKI STANDARD

## SIST EN 60843-4:2005

01-januar-2005

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**Videokasetni snemalni sistem z zapisovanjem s poševnimi sledmi na magnetnem traku, širokem 8 mm (8 mm video) – 4. del: Video subkoda (VSC) (IEC 60843-4:2000)**

Helical-scan video tape cassette system using 8 mm magnetic tape (8 mm video) -- Part 4: Video subcode (VSC)

Videoband-Kassettensystem mit Schrägspuraufzeichnung auf Magnetband 8 mm (8 mm Video) -- Teil 4: Video-Subcode (VSC)

Système de magnétoscope à cassette à balayage hélicoïdal utilisant la bande magnétique de 8 mm (vidéo 8 mm) -- Partie 4: Sous-code vidéo (VSC)

**Ta slovenski standard je istoveten z: EN 60843-4:2000**

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**ICS:**

33.160.40      Video sistemi                                      Video systems

**SIST EN 60843-4:2005**                                      **en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60843-4**

April 2000

ICS 33.160.40

English version

**Helical-scan video tape cassette system  
using 8 mm magnetic tape (8 mm video)  
Part 4: Video subcode (VSC)  
(IEC 60843-4:2000)**

Système de magnétoscope à cassette  
à balayage hélicoïdal utilisant la bande  
magnétique de 8 mm (vidéo 8 mm)  
Partie 4: Sous-code vidéo (VSC)  
(CEI 60843-4:2000)

Videoband-Kassettensystem mit  
Schrägschraufzeichnung auf  
Magnetband 8 mm (8 mm Video)  
Teil 4: Video-Subcode (VSC)  
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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 100B/242/FDIS, future edition 1 of IEC 60843-4, 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 60843-4 on 2000-04-01.

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) 2001-01-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2003-04-01

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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### Endorsement notice

The text of the International Standard IEC 60843-4:2000 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 60461	1986	Time and control code for video tape recorders	HD 507 S1	1988
IEC 60843	Series	Helical-scan video tape cassette system using 8 mm magnetic tape - 8 mm Video	EN 60843	Series

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**CEI  
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**60843-4**

Première édition  
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2000-02

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**Système de magnétoscope à cassette à balayage  
hélicoïdal utilisant la bande magnétique  
de 8 mm (vidéo 8 mm) –**

**Partie 4:  
Sous-code vidéo (VSC)**

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

**Part 4:  
Video subcode (VSC)**

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International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HELICAL-SCAN VIDEO TAPE CASSETTE SYSTEM  
USING 8 mm MAGNETIC TAPE (8 mm VIDEO) –**
**Part 4: Video subcode (VSC)**

## 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 60843-4 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/242/FDIS	100B/258/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.

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 2003.

At this date the publication will be

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

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

### Part 4: Video subcode (VSC)

#### 1 General

##### 1.1 Scope

This part of IEC 60843 specifies a method of auxiliary data recording and playback with the IEC 60843 8 mm video system. This part is applicable to both 525 line – 60 field and 625 line – 50 field television systems.

##### 1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60843. 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 60843 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 60461:1986, *Time and control code for video tape recorders*

IEC 60843 (all parts), *Helical-scan video tape cassette system using 8 mm magnetic tape*

#### 2 Area allocation and dimensions

##### 2.1 Types of video subcode (VSC)

There are two types of VSC which are 1 block VSC and 5 block VSC.

##### 2.2 1 block VSC

Figure 1 shows the recording area of 1 block VSC.

The recording area of 1 block VSC shall be specified by the head switching point.

All of the data area, search mark and erase code should be recorded.

##### 2.3 5 block VSC

##### 2.3.1 5 block VSC with PCM audio

Figure 2 shows the recording area of 5 block VSC with PCM audio.

The recording area of 5 block VSC with PCM audio shall be specified by the distance from the head switching point.

All the data area, search mark and erase code should be recorded.

The erase code should have a variable length relative to the position of PCM data area.

### 2.3.2 5 block VSC without PCM audio

Figure 3 shows the recording area of 5 block VSC without PCM audio.

The recording area of 5 block VSC without PCM audio shall be specified by the distance from the head switching point.

All of the data area, search mark and erase code should be recorded.

## 3 Data structure

### 3.1 1 block VSC

Figure 4 shows the data area of 1 block VSC.

1 block VSC consists of a block named Block 4.

Block 4 is common to 5 block VSC and 1 block VSC.

### 3.2 5 block VSC

Figure 5 shows the data area of 5 block VSC.

5 block VSC has an extended data area from Block 0 to Block 3.

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## 4 Channel coding

### 4.1 Modulation

The modulation method shall be a bi-phase mark, except for the synchronization code.

### 4.2 Transmission rate

The transmission rate shall be 368 times the horizontal sync frequency, 5,79 Mbit/s for the 525 line – 60 field system and 5,75 Mbit/s for the 625 line – 50 field system.

### 4.3 Erase code

The erase code shall be all "1".

### 4.4 Search mark

The data sign of the search mark shall be all "0" for enable.