



SLOVENSKI STANDARD

SIST EN 61041-4:1999

01-april-1999

Non-broadcast video tape recorders - Methods of measurement -- Part 4: Calibration tape (NTSC/PAL/SECAM) (IEC 61041-4:1997)

Non-broadcast video tape recorders - Methods of measurement -- Part 4: Calibration
tape (NTSC/PAL/SECAM)

Videobandgeräte für den Gebrauch außerhalb des Rundfunks - Meßverfahren -- Teil 4:
Bezugsband (NTSC/PAL/SECAM)

Magnétoscopes hors radiodiffusion - Méthodes de mesure -- Partie 4: Bande étalon
(NTSC/PAL/SECAM)

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Ta slovenski standard je istoveten z: EN 61041-4:1997

ICS:

33.160.40 Video sistemi Video systems

SIST EN 61041-4:1999 **en**

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ICS 33.160.40

Descriptors: Recording apparatus, video recording, sound recording, magnetoscopes, magnetic tapes, standard measures, measurements, video signals, specifications

English version

**Non-broadcast video tape recorders
Methods of measurement
Part 4: Calibration tape (NTSC/PAL/SECAM)
(IEC 61041-4:1997)**

Magnétoscopes hors radiodiffusion
Méthodes de mesure
Partie 4: Bande étalon
(NTSC/PAL/SECAM)
(CEI 61041-4:1997)

Videobandgeräte für den Gebrauch
außerhalb des Rundfunks
Meßverfahren
Teil 4: Bezugsband für Videobandgeräte
für den Gebrauch außerhalb des
Rundfunks
(IEC 61041-4:1997)

This European Standard was approved by CENELEC on 1997-07-01. 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, 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

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Foreword

The text of document 100B/44/FDIS, future edition 1 of IEC 61041-4, prepared by SC 60B (transformed into SC 100B, Recording, 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 61041-4 on 1997-07-01.

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) 1998-04-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 1998-04-01

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 61041-4:1997 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 60094-2	1994	Magnetic tape sound recording and reproducing systems Part 2: Calibration tapes	EN 60094-2	1995
IEC 61041-1	1990	Non-broadcast video tape recorders Methods of measurement Part 1: General video (NTSC/PAL) and audio (longitudinal) characteristics	EN 61041-1	1995
IEC 61041-2	1994	Part 2: Video characteristics chrominance SECAM	EN 61041-2	1996
IEC 61041-3	1993	Part 3: Audio characteristics for FM recording	EN 61041-3	1995
IEC 61054	1991	Helical-scan video tape cassette system using 12,65 mm (0,5 in) magnetic tape on type VHS - FM audio recording	EN 61054	1993
ITU-R Recommendation 471-1	1990	Nomenclature and description of colour bar signals	-	-
EIA RS-189A	1976	Encoded colour bar signal	-	-

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NORME
INTERNATIONALE

CEI
IEC

INTERNATIONAL
STANDARD

61041-4

Première édition
First edition
1997-05

**Magnétoscopes hors radiodiffusion –
Méthodes de mesure –**

**Partie 4:
Bande étalon (NTSC/PAL/SECAM)**

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**Non-broadcast video tape recorders –
Methods of measurement –**

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**Part 4:
Calibration tape (NTSC/PAL/SECAM)**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**NON-BROADCAST VIDEO TAPE RECORDERS –
METHODS OF MEASUREMENT –
Part 4: Calibration tape (NTSC/PAL/SECAM)**

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 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 61041-4 has been prepared by subcommittee 60B: Video recording, then by subcommittee 100B: Recording, 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/44/FDIS	100B/64/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.

IEC 61041 consists of the following parts under the general title: *Non-broadcast video tape recorders – Methods of measurement*:

Part 1: 1990, General video (NTSC/PAL) and audio (longitudinal) characteristics

Part 2: 1994, Video characteristics chrominance SECAM

Part 3: 1993, Audio characteristics for FM recording

Part 4: 1997, Calibration tape (NTSC/PAL/SECAM)

Part 5: 1997, High-band video tape recorders, including those equipped with Y/C video connectors (NTSC/PAL)

INTRODUCTION

This part of IEC 61041 has been prepared for the reasons given below.

Some of the measurement items for non-broadcast video tape recorders in IEC 61041 require specific test signals which may not be available from a general purpose test signal generator. In this case, a calibration tape can be made and used to supply the required test signals for measurement.

The video tape recorders on the market today have very good record and playback compatibility, provided that the level of the test signals and the frequencies of the carriers to be recorded are set precisely within specifications. The calibration tape can therefore be made using a non-broadcast video tape recorder of the relevant recording format by recording the specified test signals.

This part of IEC 61041 specifies the video and audio test signals to be recorded on the calibration tape which is used when measuring video and audio characteristics of non-broadcast video tape recorders, in accordance with the measurement items prescribed in IEC 61041.

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NON-BROADCAST VIDEO TAPE RECORDERS – METHODS OF MEASUREMENT – Part 4: Calibration tape (NTSC/PAL/SECAM)

Section 1: General

1.1 Scope and object

This part of IEC 61041 specifies the general requirements for the calibration tape which is used for measurement of signal characteristics of the playback systems of non-broadcast video tape recorders (NTSC/PAL/SECAM).

The calibration tape specified in this part of IEC 61041 applies particularly to the measurement items prescribed in the relevant part of IEC 61041 which require complex test signals, which are unavailable from a general purpose test signal generator.

The object of this part is to describe the methods of measurement for non-broadcast video tape recorders.

This part of IEC 61041 describes also the procedures for generating the signals and for recording the signals on the calibration tape.

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1.2 Normative references **(standards.iteh.ai)**

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61041. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 61041 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60094-2: 1994, *Magnetic tape sound recording and reproducing systems – Part 2: Calibration tapes*

IEC 61041-1: 1990, *Non-broadcast video tape recorders – Methods of measurement – Part 1: General video (NTSC/PAL) and audio (longitudinal) characteristics*

IEC 61041-2: 1994, *Non-broadcast video tape recorders – Methods of measurement – Part 2: Video characteristics chrominance SECAM*

IEC 61041-3: 1993, *Non-broadcast video tape recorders – Methods of measurement – Part 3: Audio characteristics for FM recording*

IEC 61054: 1991, *Helical-scan video tape cassette system using 12,65 mm (0,5 in) magnetic tape on type VHS – FM audio recording*

ITU-R Recommendation 471-1: 1990, *Nomenclature and description of colour bar signals*

EIA RS-189A: 1976, *Encoded colour bar signal*