SLOVENSKI STANDARD
SIST EN 61119-5:1999

01-april-1999

Digital audio tape cassette system (DAT) -- Part 5: DAT for professional use (IEC 61119-5:1993)

Digital audio tape cassette system (DAT) -- Part 5: DAT for professional use

Digitales Tonband-Kassetten-System (DAT) -- Teil 5: DAT für professionelle Anwendung

Système audionumérique à cassette (DAT) -- Partie 5: DAT pour usage professionnel

Ta slovenski standard je istoveten z: **EN 61119-5:1995**

ICS:

33.160.30 Avdio sistemi Audio systems

SIST EN 61119-5:1999 **en**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61119-5

January 1995

ICS 33.160.30

Descriptors: Sound recording, digital recording, data recording devices, audiocassettes, magnetic tapes, recording tracks, layout, codification, track formats, characteristics

English version

Digital audio tape cassette system (DAT)
Part 5: DAT for professional use
(IEC 1119-5:1993)

Système audionumérique à cassette (DAT)
Partie 5: DAT pour usage professionnel
(CEI 1119-5:1993)

Digitales Tonband-Kassetten-System (DAT)
Teil 5: DAT für professionelle Anwendung
(IEC 1119-5:1993)

This European Standard was approved by CENELEC on 1994-12-06. 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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the International Standard IEC 1119-5:1993, prepared by SC 60A, Sound recording, of IEC TC 60, Recording, was submitted to the formal vote and was approved by CENELEC as EN 61119-5 on 1994-12-06 without any modification.

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) 1995-12-15
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1995-12-15

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

Endorsement notice

The text of the International Standard IEC 1119-5:1993 was approved by CENELEC as a European Standard without any modification.

ANNEX ZA (normative)

OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD WITH THE REFERENCES OF THE RELEVANT 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.

NOTE : When the international publication has been modified by CENELEC common modifications, indicated by (mod), the relevant EN/HD applies.

IEC Publication	Date	Title	EN/HD	Date
461	1986	Time and control code for video tape recorders	HD 507 S1	1988
958	1989	Digital audio interface	EN 60958	1990
1119-1	1992	Digital audio tape cassette system (DAT) Part 1: Dimensions and characteristics	EN 61119-1	1994

NORME INTERNATIONALE
INTERNATIONAL STANDARD

CEI
IEC
1119-5

Première édition
First edition
1993-05

Système audionumérique à cassette (DAT)

Partie 5:
DAT pour usage professionnel

Digital audio tape cassette system (DAT)

Part 5:
DAT for professional use

Bureau central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève Suisse

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE
Q

Pour prix, voir catalogue en vigueur
For price, see current catalogue

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

DIGITAL AUDIO TAPE CASSETTE SYSTEM (DAT)

Part 5: DAT for professional use

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 cooperation 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, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.

3) They have the form of recommendations for international use 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.

International Standard IEC 1119-5 has been prepared by sub-committee 60A: Sound recording, of IEC technical committee 60: Recording.

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

DIS	Report on Voting
60A(CO)138	60A(CO)150

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 1119 consists of the following parts, under the general title: Digital audio tape cassette system (DAT):

- Part 1: 1992, Dimensions and characteristics
- Part 2: 1991, DAT calibration tape
- Part 3: 1992, DAT tape properties
- Part 5: 1993, DAT for professional use
- Part 6: 1992, Serial copy management system

Annex A is for information only.

Part 4 is under consideration.

DIGITAL AUDIO TAPE CASSETTE SYSTEM (DAT)

Part 5: DAT for professional use

Explanatory notes

IEC 1119-5 shall be used in conjunction with the first edition (1992) of IEC 1119-1: *Digital audio tape cassette system (DAT) – Part 1: Dimensions and characteristics.*

The clause numbers of this Part 5 corresponds to those in IEC 1119-1, and any text given in this Part 5 shall modify the text given in IEC 1119-1. Absence of text in this Part 5 indicates that the provisions of the relevant clause in IEC 1119-1 shall apply.

1 Scope and object

This part of IEC 1119 applies to professional use of the digital audio tape cassette system (DAT) for recording and/or reproducing digital audio signals. It defines the mechanical and electrical characteristics necessary to ensure full interchangeability between software and hardware in any geographical location.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 1119. 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 1119 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 461: 1986, *Time and control code for video tape recorders*

IEC 958: 1989, *Digital audio interface*

IEC 1119-1: 1992, *Digital audio tape cassette system (DAT) – Part 1: Dimensions and characteristics*

3 Description of the system

The information carrier is a magnetic tape of 3,81 mm width wound on flangeless hubs which are located in a cassette containing a slider and a lid to protect the tape from accidental damage. The tape is of the metal powder type or its equivalent. The digital

information is recorded using the helical scanning principle and can be erased by over-writing.

The digital information is read by magnetic heads using an automatic track finding (ATF) scheme for following the tracks.

6 Track configuration and pattern

6.1 *Track configuration*

6.1.1 *Tape speed and number of tracks per second*

The speed of the magnetic tape shall be 8,150 mm/s ± 0,5% and the number of tracks recorded per second shall be 200/3.

11 Audio encoding

11.1 *Mode application*

11.1.1 *Audio encoding mode*

Three audio encoding modes are specified. These modes are called the 48k mode, the 44k mode and the 32k mode.

11.1.2 *System application*

The 48k mode is mandatory. The 44k mode and 32k mode are optional.

11.2 *Source encoding*

11.2.1 *Pre-emphasis*

In general the use of pre-emphasis is not recommended. If pre-emphasis is applied, it shall be identified on the tape and shall have the same characteristics as IEC 1119-1.

11.2.2 *Number of audio channels*

Two channels of the audio signal, indicated as A and B, can be recorded in the 48k mode, 44k mode and 32k mode.

The channels A and B correspond to left and right channels respectively, in stereophonic use.

11.2.3 *Sampling frequency*

The accuracy of the sampling frequency at the encoding shall be within $\pm 50 \cdot 10^{-6}$.