
Helical-scan video-tape cassette system using 19 mm (3/4 in) magnetic tape, known as U-format (IEC 60712:1993)

Helical-scan video-tape cassette system using 19 mm (3/4 in) magnetic tape, known as U-format

Video-Bandkassettensystem mit Schrägspuraufzeichnung auf Magnetband 19 mm, bekannt m-als U-Format

Système à cassette à bande vidéo à balayage hélicoïdal utilisant la bande magnétique de 19 mm (3/4 in), d'appellation format-U

Ta slovenski standard je istoveten z: EN 60712:1994

ICS:

33.160.40

Video sistemi

Video systems

SIST EN 60712:1999

en

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EUROPEAN STANDARD

EN 60712

NORME EUROPEENNE

EUROPÄISCHE NORM

September 1994

ICS 33.160.40

Supersedes HD 447 S1:1984

Descriptors: Magnetic video recording, helical scanning, television recording and replay, cassettes, dimensions, requirements, properties

ENGLISH VERSION

Helical-scan video-tape cassette system using
19 mm (3/4 in) magnetic tape, known as U-format
(IEC 712:1993)

Système à cassette à bande vidéo
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(CEI 712:1993)

Video-Bandkassettensystem mit
Schrägschraufzeichnung auf
Magnetband 19 mm, bekannt als
U-Format
(IEC 712:1993)

STANDARD PREVIEW
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This European Standard was approved by CENELEC on 1994-07-05.
CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations
which stipulate the conditions for giving this European Standard the status of
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Up-to-date lists and bibliographical references concerning such national standards
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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 CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 712:1993 could be accepted without textual changes, has shown that no common modifications were necessary for the acceptance as European Standard.

The reference document was submitted to the CENELEC members for formal vote and was approved by CENELEC as EN 60712 on 5 July 1994.

This European Standard replaces HD 447 S1:1984.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1995-07-15
- latest date of withdrawal of conflicting national standards (dow) 1995-07-15

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.

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ENDORSEMENT NOTICE

SIST EN 60712:1999

The text of the International Standard IEC 712:1993 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
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94	Series	Magnetic tape sound recording and reproducing systems	EN 60094	Series
461	1986	Time and control code for video tape recorders	HD 507 S1	1988

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NORME INTERNATIONALE INTERNATIONAL STANDARD

**CEI
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Deuxième édition
Second edition
1993-06

**Système à cassette à bande vidéo à balayage
hélicoïdal utilisant la bande magnétique
de 19 mm ($\frac{3}{4}$ in), d'appellation format-U**

**Helical-scan video-tape cassette system
using 19 mm ($\frac{3}{4}$ in) magnetic tape,
known as U-format**

SIST EN 60712:1999

<https://standards.iteh.ai/catalog/standards/sist/c0243717-5177-48ac-a71c-a179983be8dd/sist-en-60712-1999>

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HELICAL-SCAN VIDEO-TAPE CASSETTE SYSTEM USING 19 mm ($\frac{3}{4}$ in) MAGNETIC TAPE KNOWN AS U-FORMAT

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.

SIST EN 60712:1999

International Standard IEC 712 has been prepared by sub-committee 60B: Video recording, of IEC technical committee 60: Recording

This second edition cancels and replaces the first edition published in 1982 of which it constitutes a minor revision. It includes specifications for U-matic H-format magnetic tape.

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

DIS	Report on Voting
60B(CO)109	60B(CO)120

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

INTRODUCTION

This International Standard provides specifications for a helical-scan video-tape cassette recording and reproducing system which makes use of tape 19 mm ($\frac{3}{4}$ in) wide. The system is widely used in educational and industrial television facilities and is suitable for both 625 line-50 field and 525 line-60 field television signals. The parameters for different systems are given in the specifications which follow. This cassette system is also used in some broadcasting facilities in conjunction with special equipment designed to stabilize the reproduced signals to meet broadcasting requirements.

The mechanical and electrical specifications for the U-matic H-format are contained in this standard.

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HELICAL-SCAN VIDEO-TAPE CASSETTE SYSTEM USING 19 mm ($\frac{3}{4}$ in) MAGNETIC TAPE KNOWN AS U-FORMAT

CHAPTER 1: SPECIFICATIONS FOR BASIC SYSTEM

SECTION 1: GENERAL

1 Scope and object

This standard applies to magnetic video recording and/or playback with 19 mm ($\frac{3}{4}$ in) tape cassettes on two-head helical-scan videocassette recorders, suitable for recording and/or playback of monochrome as well as colour television programmes.

It gives dimensional and other characteristics necessary to permit the interchangeability of cassettes. For some parameters, the specification is only possible through the description of recorded tapes which implies making reference to the television system or standard in use. In such cases, the reference made for instance to 525 line-60 field or 625 line-50 field systems shall be considered as an example.

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2 Normative references

[SIST EN 60712:1999](#)

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard 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 94: *Magnetic tape sound recording and reproducing systems*

IEC 461: 1986, *Time and control code for video-tape recorders*

3 Environment

3.1 Testing environment

Tests and measurements made on the system to check the requirements of this standard shall be carried out under the following conditions:

temperature:	20 ± 1 °C;
relative humidity:	48 % to 52 %;
air pressure:	86 kPa to 106 kPa;
conditioning before testing:	24 h.