Video recording - 12,65 mm type D-11 format - Part 2: Picture compression and data stream

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 62356-
2:2004 sisaldab Euroopa standardi EN
62356-2:2004 ingliskeelset teksti.

Käesolev dokument on jõustatud 16.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 62356-2:2004 consists of the English text of the European standard EN 62356-2:2004.

This document is endorsed on 16.11.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

specifies the compression of a highdefinition source format to a dual-channel packetized data stream format which is suitable for recording on disc and tape storage devices including the Type D-11 tape recorder

Scope:

specifies the compression of a highdefinition source format to a dual-channel packetized data stream format which is suitable for recording on disc and tape storage devices including the Type D-11 tape recorder

ICS 33.160.40

Võtmesõnad:

EUROPEAN STANDARD

EN 62356-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2004

ICS 33.160.40

English version

Video recording – 12,65 mm type D-11 format Part 2: Picture compression and data stream

(IEC 62356-2:2003)

Enregistrement Vidéo – Format 12,65 mm de type D11 Partie 2: Flux de données et compression d'image (CEI 62356-2:2003) Videoaufzeichnung – D-11-Format mit 12,65 mm Teil 2: Bildkompression und Datenstrom (IEC 62356-2:2003)

This European Standard was approved by CENELEC on 2004-09-01. 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.

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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 the International Standard IEC 62356-2:2003, prepared by IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the formal vote and was approved by CENELEC as EN 62356-2 on 2004-09-01 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) 2005-09-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2007-09-01

Annex ZA has been added by CENELEC.

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356-2:2003 The text of the International Standard IEC 62356-2:2003 was approved by CENELEC as a European Standard without any modification.

Endorsement notice

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE Where 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>	EN/HD	<u>Year</u>
SMPTE 292M	1998	BIT-serial digital interface for high- definition television systems	-	-
SMPTE 274M	1998	Television - 1920 x 1080 scanning and analog and parallel digital interfaces for multiple picture rates	-	-
SMPTE RP 211	2000	Implementation of 24P, 25P and 30P segmented frames for 1920 x 1080 production format	-	-
SMPTE 12M	1999	Television, audio and film - Time and control code	-	-
SMPTE RP 188	1999	Transmission of time code and control code in the ancillary data space of a digital television data stream	-	-
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INTERNATIONAL STANDARD

IEC 62356-2

First edition 2003-11

Video recording – 12,65 mm type D-11 format –

Part 2: Picture compression and data stream

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International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

VIDEO RECORDING - 12,65 MM TYPE D-11 FORMAT -

Part 2: Picture compression and data stream

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62356-2 has been prepared by IEC technical committee 100: Audio, video and multimedia systems and equipment.

It was submitted to the national committees for voting under the Fast Track Procedure as the following documents:

CDV	Report on voting
100/630/CDV	100/700/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.

The committee has decided that the contents of this publication will remain unchanged until 2008-11. At this date, the publication will be

- reconfirmed;
- withdrawn;
- Occument is a previous denerated by the replaced by a revised edition, or
- amended.

VIDEO RECORDING - 12,65 MM TYPE D-11 FORMAT -

Part 2: Picture compression and data stream

1 Scope

This International Standard specifies the compression of a high-definition source format to a dual-channel packetized data stream format which is suitable for recording on disc and tape storage devices including the Type D-11 tape recorder. The specification includes a number of basic packetizing operations including the shuffling of the source data prior to compression, both to aid compression performance and to allow error concealment processing in the decoder. The standard also includes the processes required to decode the compressed Type D-11 packetized data format into a high-definition output signal.

This standard supports high-definition source formats using 1 920×1080 pixels and the sampling structures as specified in SMPTE 274M and RP 211 at the following picture rates:

- 24/1,001/PsF;
- 24/PsF:
- 25/PsF;
- 30/1,001/PsF;
- 50/l;
- 60/1,001/I

where 'PsF' indicates Progressive segmented Frame and 'I' indicates Interlaced.

The data packet format specified by this standard is used as the source data stream for the associated document which maps this Type D-11 packetized data-stream format together with AES3 data over SDTI.

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.

SMPTE 292M:1998, Television – Bit-Serial Digital Interface for High-Definition Television Systems

SMPTE 274M:1998, Television - 1920 \times 1080 Scanning and Analog and Parallel Digital Interfaces for Multiple Picture Rates

SMPTE RP 211:2000, Implementation of 24P, 25P and 30P Segmented Frames for 1920 \times 1080 Production Format

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

SMPTE RP 188:1999, Transmission of Time Code and Control Code in the Ancillary Data Space of a Digital Television Data Stream