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Consumer audio/video equipment –
Digital interface –

Part 2:
SD-DVCR data transmission



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONSUMER AUDIO/VIDEO EQUIPMENT –
DIGITAL INTERFACE –****Part 2: SD-DVCR data transmission**

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International Standard IEC 61883-2 has been prepared by technical area 4: Digital system interfaces and protocols, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This second edition of IEC 61883-2 cancels and replaces the first edition published in 1998. This edition contains the following significant technical changes with respect to the previous edition:

- a) Added STYPE for SMPTE Type D-7 50Mbit/s system and SMPTE Type D-12 100Mbit/s system.
- b) Added specifications of IEEE 1394 packet, CIP header and transmission timing in high speed transmission.

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

CDV	Report on voting
100/727/CDV	100/816/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.

IEC 61883 consists of the following parts under the general title *Consumer audio/video equipment – Digital interface*:

Part 1: General

Part 2: SD-DVCR data transmission

Part 3: HD-DVCR data transmission

Part 4: MPEG2-TS data transmission

Part 5: SDL-DVCR data transmission

Part 6: Audio and music data transmission protocol

Part 7: Transmission of ITU-R BO.1294 System B

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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

A bilingual version of this document may be issued at a later date.

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CONSUMER AUDIO/VIDEO EQUIPMENT – DIGITAL INTERFACE –

Part 2: SD-DVCR data transmission

1 Scope

This part of IEC 61883 specifies the packet format and the transmission timing for SD-DVCR data. It describes the specifications for the IEEE 1394 packet, the CIP header for 525-60 and 625-50 television systems, and the transmission timing.

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.

IEC 61834-2, *Recording – Helical-scan digital video cassette recording system using 6,35 mm magnetic tape for consumer use (525-60, 625-50, 1125-60 and 1250-50 systems) – Part 2: SD format for 525-60 and 625-50 systems*

IEC 61883-1, *Consumer audio/video equipment – Digital interface – Part 1: General*

3 Abbreviations

For the purposes of this document, the following abbreviations apply.

525-60 system:	the 525-line system with a frame frequency of 29,97 Hz
625-50 system:	the 625-line system with a frame frequency of 25,00 Hz
IEEE 1394 packet:	IEEE 1394 isochronous packet defined in IEC 61883-1
SD-DVCR:	standard definition digital video cassette recorder

4 Construction of IEEE 1394 packet

4.1 Source packet structure of the SD-DVCR data stream

For the SD-DVCR data stream, the data structure for digital interface defined in IEC 61834-2, Clause 11 is used. The source packet size for SD-DVCR data stream is 480 bytes, divided into 6 DIF blocks.

The correspondence between DIF blocks and source packets for the 525-60 system and the 625-50 system are shown in Figure 1 and Figure 2 respectively.

4.2 Packetization of source packet of the SD-DVCR data stream

A source packet shall not be divided and shall be equal to a data block.

Data blocks transmitted in an IEEE 1394 isochronous cycle shall be determined according to the TR value in the CIP header (see 5.2). An empty packet is placed in any cycle with no data block: