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Edition 1.1 2014-02

CONSOLIDATED VERSION

colour inside

Consumer audio/video equipment – Digital interface – Part 8: Transmission of ITU-R BT.601 style digital video data

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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REDLINE VERSION

colour inside

Consumer audio/video equipment – Digital interface – Part 8: Transmission of ITU-R BT.601 style digital video data



IEC 61883-8:2008-11+AMD1:2014-02 CSV(EN)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONSUMER AUDIO/VIDEO EQUIPMENT – DIGITAL INTERFACE –

Part 8: Transmission of ITU-R BT.601 style digital video data

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This Consolidated version of IEC 61883-8 bears the edition number 1.1. It consists of the first edition (2008-11) [documents 100/1446/FDIS and 100/1476/RVD] and its amendment 1 (2014-02) [documents 100/2051/CDV and 100/2106/RVC]. The technical content is identical to the base edition and its amendment.

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions and deletions are displayed in red, with deletions being struck through. A separate Final version with all changes accepted is available in this publication.

This publication has been prepared for user convenience.

International Standard IEC 61883-8 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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 61883 series, under the general title *Consumer audio/video equipment – Digital interface,* can be found on the IEC website.

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

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

IMPORTANT – The "colour inside" logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.

INTRODUCTION TO AMENDMENT 1

The revision of IEC 61883-8:2008, has become necessary to define the following new additional copy control information.

- Analog sunset token
- Digital only token
- Copy count

CONSUMER AUDIO/VIDEO EQUIPMENT – DIGITAL INTERFACE –

Part 8: Transmission of ITU-R BT.601 style digital video data

1 Scope

This part of IEC 61883 specifies a protocol for the transport of uncompressed or compressed video data in the 4:2:2 format of recommendation ITU-R BT.601 (including compatible extensions to this format for the higher and lower resolutions of other commonly used video resolutions) over high performance serial bus, as specified by IEEE Std 1394-1995 as amended by IEEE Std 1394a-2000 and IEEE Std 1394b-2002 (collectively IEEE 1394). The data formats for the encapsulation of video data are compatible with those specified by IEC 61883-1. Associated audio data, if any, should be formatted as specified by IEC 61883-6.

There are many commonly used video formats unsupported by IEC 61883, such as MPEG-4, Windows Media Format (WMF) and the format used by automotive navigation applications. Support for all or most of these formats in rendering devices would require implementation of multiple video codecs. This is an undue burden that may be avoided if the source device converts to ITU-R BT.601 4:2:2 format and, if necessary, compresses the data with a codec supported by all destination devices. An additional advantage is that on-screen display (OSD) information may be mixed with video data prior to transmission to the rendering device.

Because ITU-R BT.601 4:2:2 format is widely used internally in contemporary AV equipment, this specification permits straight-forward integration of IEEE 1394 into these devices and enables markets whose usage scenarios include single video sources transmitting to one or more video displays, such as:

– consumer electronic STB or DVD video rendered by multiple displays in the home;
– automotive navigation and entertainment; and
– aeronautical in-flight entertainment.

For the sake of interoperability and bounded implementation complexity, it is essential that the specification provide the following:

– a 1394 TA controlled list of compression codecs; and
– at a minimum, a reference to one video compression codec.

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 61883 (all parts), *Consumer audio/video equipment – Digital interface*

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

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IEEE Std 1394-1995, *Standard for a high performance serial bus*

IEEE Std 1394a-2000, *Standard for a high performance serial bus*
Amendment 1

IEEE Std 1394b-2002, *Standard for a high performance serial bus*
Amendment 2

Throughout this document, the term IEEE 1394 refers to IEEE Std 1394-1995 as amended by IEEE Std 1394a-2000 and IEEE Std 1394b-2002.

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VESA Monitor Timing Specifications, VESA and Industry Standards and Guidelines for Computer Display Monitor Timing, Version 1.0, Revision 0.8

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FINAL VERSION

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