INTERNATIONAL STANDARD

IEC 61883-6

Second edition 2005-10

Consumer audio/video equipment - Digital interface -

Part 6:

Audio and music data transmission protocol



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CONTENTS

FO	REWORD	6
1	Scope	8
2	Normative references	8
3	Terms and definitions	
4	Reference model for data transmission	
7	4.1 Application layer	
	4.2 Adaptation layer	
	4.3 Packetization layer	12
5	Transport requirements	13
Ü	5.1 Arbitrated short bus reset	13
		13
6	Packet header for audio and music data	13
•	6.1 Isochronous packet header format	13
	6.2 CIP header format	_
7	Packetization	
	7.1 Packet transmission method	
	7.2 Transmission of timing information.	
	7.3 Time stamp processing	
	7.4 Transmission control	
8	Event types	17
	8.1 General	17
	8.2 AM824 data	
	8.3 32-bit floating-point data	28
	8.4 24-bit *4 audio pack	28
	8.5 32-bit generic data	
9	FDF definition	29
	9.1 Introduction	29
	9.2 Basic format	30
	9.3 Special format	31
10	FDF definition for AM824 data	32
	10.1 Definition of N-flag	32
	10.2 Supplementary SFC definition	32
	10.3 Clock-based rate control mode (FDF = 0000 0xxx ₂)	33
	10.4 Command-based rate control mode (FDF = 00001xxx ₂)	
11	AM824 adaptation process	35
	11.1 Introduction	35
	11.2 Basic sequence conversion	
	11.3 Sequence multiplexing	
	11.4 Compound data block structure	
12	AM824 sequence adaptation layers	
	12.1 General	
	12.2 DVD-Audio	
	12.3 SACD definition	59

Annex A (informative)	Blocking transmission method	64
Annex B (informative)	Synchronization issues	66
Annex C (informative)	Catching up in non-blocking transmission method	68
Annex D (informative)	Transport characteristics	69
Bibliography		77
Figure 1 – Reference r	model for audio and music data transmission	10
	model for AM824 data transmission	
Figure 3 – Implementa	ition example of receiver	12
Figure 4 – Isochronous	s packet header	13
Figure 5 – Common iso	ochronous packet (CIP) format	14
Figure 6 – Non-blockin	ng transmission method	16
Figure 7 – Transmissio	on parameters	17
) 18
Figure 9 – Pack and cl	luster events	19
Figure 10 – Pack even		19
Figure 11 – Generic Al	M824 format	20
Figure 12 – AM824 dat	ta with SUB LABEL	20
Figure 13 – AM824 LA	BEL allocation map (informative)	21
Figure 14 – IEC 60958	3-conformant data format	22
Figure 15 – MBLA data	a	22
Figure 16 – Raw audio	data	23
Figure 17 – Alignment	of 20-bit data in 24-bit field	23
Figure 18 – MIDI confo	ormant data format	24
Figure 19 - No-data to	ormat	24
	sion multi-bit linear audio data	
Figure 21 – Generic hi	gh-precision quadlet sequence	25
Figure 22 - Generic ar	ncillary data	26
Figure 23 - Ancillary n	no data	26
Figure 24 – General fo	rmat for ASID	27
Figure 25 – General fo	ormat for application-specific ancillary data	28
Figure 26 – 32-bit float	ting-point data format	28
Figure 27 – 24-bit * 4 a	audio pack format	29
Figure 28 – 32-bit gene	eric data format	29
Figure 29 – Generic FI	DF definition	30
Figure 30 – FDF code	for NO-DATA packet	31
Figure 31 – Structure of	of FDF for AM824 data type	32
Figure 32 – SFC interp	pretation	32
Figure 33 – FDF for AM	M824 and AM824 LABEL space (informative)	33
Figure 34 – Adaptation	n to AM824 sequence	35
Figure 35 – Asynchron	nous sequence multiplexing	36
Figure 36 – Example o	of compound data block	37

Figure 37 – Condition of AM824 rule	37
Figure 38 – Generic compound data block structure	38
Figure 39 – Example of unspecified region structure	39
Figure 40 – Generic one-bit audio quadlet	47
Figure 41 – Generic one-bit audio quadlet sequence	48
Figure 42 – One-bit audio DST encoded quadlet	48
Figure 43 – Multiplexing of MIDI data streams	49
Figure 44 – High-precision first ancillary data	50
Figure 45 – IEC 60958-conformant data with high-precision data	51
Figure 46 – Common and application-specific ancillary data with high-precision data	52
Figure 47 – High-precision channel assignment ancillary data	52
Figure 48 – Example of high-precision data	53
Figure 49 – Example of double-precision data	54
Figure 50 – Example of double-precision compound data	55
Figure 51 – Data transmitted at data starting-point	56
Figure 52 – Data transmitted at every data block	57
Figure 53 – Ancillary data for CCI	57
Figure 54 – Ancillary data for ISRC	58
Figure 55 – Basic data block of DVD-Audio stream	58
Figure 56 – Example of DVD-Audio data	59
Figure 57 – SACD ancillary data	60
Figure 58 – SACD supplementary data	61
Figure 59 – SACD Track_Mode&Flags data	61
Figure 60 – SACD Track_Copy_Management data	61
Figure 61 – Example of SACD stream in the case of six channels	62
Figure 62 – Example of SACD stream in the case of five channels	63
Figure A. 1 – Blocking transmission method	64
Figure D.1 – Two-node bus	72
Figure D.2 - Three node bus	
Figure D.3 - Thirty-rive-node bus	74
Figure D.4 – Sample-clock recovery jitter attenuation template	75
Figure D.5 – Sample clock jitter measurement filter characteristic	76
Table 1 – Isochronous packet header fields	13
Table 2 – CIP fields	14
Table 3 – LABEL definition	21
Table 4 – SB and SF definitions	
Table 5 – ASI1 definition	23
Table 6 – VBL (valid bit length code) definition	23
Table 7 – LABEL definition for one-bit audio (plain)	23
Table 8 – LABEL definition for one-bit audio (encoded)	24
Table 9 – C (counter) definition	24
Table 10 – Num (slot number) definition	25

Table 11 – LABEL definition for ancillary data type	26
Table 12 – LABEL definition for common ancillary data	26
Table 13 – CONTEXT definition	27
Table 14 – SUB LABEL definition for ASID	27
Table 15 – LABEL definition for application specific ancillary data	28
Table 16 – Subformat and FDF allocations	29
Table 17 – DBS for AM824 and 32-bit floating-point data	30
Table 18 – DBS for 24-bit * 4 audio pack	30
Table 19 – Event type (EVT) code definition	30
Table 20 – Default SFC table	30
Table 21 – TRANSFER_DELAY for blocking transmission	31
Table 22 – Default SFC table for FDF = 0000 0xxx ₂	33
Table 23 – TRANSFER_DELAY for blocking transmission	34
Table 24 – Default SFC table for FDF = 0000 1xxx ₂	34
Table 25 – Sampling frequency in IEC 60958-3:1999	40
Table 26 – Sampling frequency in IEC 60958-3:2002	41
Table 27 – Original sampling frequency	41
Table 28 – Up or down sampling ratio of 32 kHz line(42
Table 29 – Up or down sampling ratio of 44.1 kHz line	42
Table 30 – Up or down sampling ratio of 48 kHz line	42
Table 31 – Clock accuracy in IEC 60958-3.	42
Table 32 – Cases	43
Table 33 – Examples	44
Table 34 - Relation of values in IEC 60958-3 and A/M protocol	46
Table 35 – Sampling frequency definition of one-bit audio	47
Table 36 - TRANSFER_DELAY for blocking transmission in the case of the one-bit audio.	47
Table 37 - SFC definition of one-bit audio for high-speed AM824 data transfer	49
Table 38 – Channel definition	50
Table 39 - Acouracy definition	50
Table 40 – Recommended rules	51
Table 41 – Channel assignment definition	52
Table 42– ASI2 definition for DVD-Audio	56
Table 43- DVD-Audio specific ancillary data	56
Table 44 – Data transmitted at starting-point	57
Table 45 – Data transmitted at every data block	57
Table 46– data information (informative)	60
Table 47 – Validity flag definition	60
Table A. 1 – TRANSFER DELAY for differing values of STF	65

INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONSUMER AUDIO/VIDEO EQUIPMENT – DIGITAL INTERFACE –

Part 6: Audio and music data transmission protocol

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International Standard IEC 61883-6 has been prepared by Technical Area 4: Digital system interfaces, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This second edition of IEC 61883-6 cancels and replaces the first edition published in 2002. This edition contains the following significant technical changes with respect to the previous edition.

- a) It extends the AM824 data format transmission and specifies more details in order to reduce the ambiguities of the first edition.
- b) It introduces new Clauses 4, 10, 11 and 12 as well as Annex D and, in 8.2, specifies new data types for SMPTE time code, sample count, high-precision multi-bit linear audio and ancillary data.
- c) It changes the terminology "raw audio data" to "multi-bit linear audio (MBLA)".
- d) It defines, in Clause 11, sequence multiplexing and MIDI data required to the AM824 adaptation process.

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-7-

- e) It describes, in Clause 12, application-specific data transmission such as DVD-audio and SACD
- f) It specifies, in Clause 20, the N-flag that indicates command-based rate control and defines new sampling frequency code (SFC) definition and interpretation.

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

FDIS	Report on voting
100/1001/FDIS	100/1024/RVD

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 LTU-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;
- withdrawn:
- replaced by a revised edition, or
- amended.

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

CONSUMER AUDIO/VIDEO EQUIPMENT – DIGITAL INTERFACE –

Part 6: Audio and music data transmission protocol

1 Scope

This part of IEC 61883 describes a protocol for the transmission of audio and music data employing IEEE 1394 and specifies essential requirements for the application of the protocol.

This protocol can be applied to all modules or devices that have any kind of audio and/or music data processing, generation and conversion function blocks. This document deals only with the transmission of audio and music data; the control, status and machine-readable description of these modules or devices should be defined outside of this document according to each application area.

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 60958 (all parts), Digital audio interface

IEC 61883-1:2003, Consumer audio/video equipment – Digital interface – Part 1: General

IEC 61883-6:2002, Consumer audio/video equipment – Digital interface – Part 6: Audio and music data transmission protocol

IEEE 754:1985, Standard for Binary Floating-Point Arithmetic

IEEE 1394: Standard for a High Performance Serial Bus