



Edition 3.0 2015-06

INTERNATIONAL STANDARD

AMENDMENT 2

Digital audio interface – Part 3: Consumer applications





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FOREWORD

This amendment has been prepared by technical area 4: Digital system interfaces and protocols of IEC technical committee 100: Audio, video and multimedia systems and equipment.

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

FDIS	Report on voting		
100/2464/FDIS	100/2494/RVD		

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability 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- withdrawn,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.

INTRODUCTION to Amendment 2

The revision of IEC 60958-3:2006 has become necessary to document the protocol for transmitting the audio signal and its information in current improved audio formats and systems.

To apply IEC 60958-3 and its IEC 60958 conformant data format transmitting as part or whole of the multichannel audio data, a general channel assignment number specified in IEC 62574 is added to the C-bit.

Loudness information is added to the U-bit to enable loudness control.

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2 Normative references

Insert, in the list of normative references, the following new publication:

IEC 62574:2011, Audio, video and multimedia systems – General channel assignment of multichannel audio

5.2.2 Mode 0 channel status format for digital audio equipment for consumer use

Table 2 – Mode 0 channel status format for consumer use

Replace the rows of byte 6 and byte 7, by the following rows:



Byte 6: Information hidden in PCM signal

Replace the existing title of byte 6 of Amendment 1 by the following new title:

Byte 6 and byte 7: Information hidden in PCM and general channel assignment channel number

Replace, after the line "Additional information in LSB", *the existing text defining bits 49 to 55, by the following:*

Bits 49 to 53	General channel assignment channel number for A channel					
Bit	49 50 51 52 53 54					
State	"000000"	Channel number 1				
	"100000"	Channel number 2				
	"111110"	Channel number 32				
Bit 54 to 58	General channel assignment channel number for B channel					
Bit	55 56 57 58 59 60					
State	"000000"	Channel number 1				
	"100000"	Channel number 2				

Add, after the existing NOTE 8, the following new paragraph:

IEC 62574 specifies the general channel assignment. The channel number 1 to 32 assignments are specified in Table 1 of IEC 62574:2011

6.2.4.1 General user data format

The bits R, S, T, U, V, W have the following meaning:

Insert in the existing text defining "Mode" and "RST" a new row after "110 Latency" as follows:

111 Loudness

Add, after the existing Figure 10, the following new subclause:

6.3.3 Loudness information

Loudness information is aligned to information units, as shown in Figure 11.

Mode RSTUVW 111000 Loudness

Figure 11 – Loudness information

The second information unit is specified as follows.

0001111b

Loudness information is aligned to 16 IUs of the user information area, as shown in Figure 12.

1 (Start)	Q	LoudnessValue						
1 (Start)	Q	LoudnessValue						
1 (Start)	Q	LoudnessValue				LoudnessRange		
1 (Start)	Q	LoudnessRange						
1 (Start)	Q	LoudnessRange						
1 (Start)	Q	LoudnessRange MaxTruePeakLevel						
1 (Start)	Q	MaxTruePeakLevel						
1 (Start)	Q	MaxTruePeakLevel						
1 (Start)	Q	MaxMomentaryLoudness						
1 (Start)	Q	MaxMomentaryLoudness						
1 (Start)	Q	MaxMomentaryLoudness MaxShortTermLoudnes					rmLoudness	
1 (Start)	Q	MaxShortTermLoudness						
1 (Start)	Q	MaxShortTermLoudness						
1 (Start)	Q	MaxShortTermLoudness		0	0	0	0	
1 (Start)	Q	0	0	0	0	0	0	
1 (Start)	Q	0	0	0	0	0	0	

NOTE Loudness information is defined in EBU Tech 3285.

IEC 60958-3:2006/AMD2:2015 IEC 2015

Bibliography

Add the following entry:

EBU TECH 3285 Version 2.0, Specification of the Broadcast Wave Format (BWF)

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