



**INTERNATIONAL STANDARD ISO/IEC 14496-3:2009/Amd.4:2013**  
**TECHNICAL CORRIGENDUM 1**

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## **Information technology — Coding of audio-visual objects**

### **Part 3: Audio**

AMENDMENT 4: New levels for AAC profiles

TECHNICAL CORRIGENDUM 1

*Technologies de l'information — Codage des objets audiovisuels*

*Partie 3: Codage audio*

*AMENDEMENT 4: Nouveaux niveaux pour profils AAC*

*RECTIFICATIF TECHNIQUE 1*

Technical Corrigendum 1 to ISO/IEC 14496-3:2014 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia*.

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### **1 Changes to the text of ISO/IEC 14496-3:2009/Amd 4:2013**

*In 4.5.2.14.1.1 replace*

"Downmix loudness compensation gain sign information. One bit indicating the sign of the global downmix gain factor for a 2-ch stereo downmix "

With

"Downmix loudness compensation gain sign information. One bit indicating the sign of the global downmix gain factor for a 2-ch stereo downmix. (0 if positive, 1 if negative)".

and replace:

dmix\_a\_idx indicates an index for the generation of a 5-channel downmix as shown in Tables XX and XX

dmix\_b\_idx indicates an index for the generation of a 5-channel downmix as shown in Tables XX and XX

by:

dmix\_a\_idx indicates an index for the generation of a 5-channel downmix as shown in Tables AMD4.8 and AMD4.9

dmix\_b\_idx indicates an index for the generation of a 5-channel downmix as shown in Tables AMD4.8 and AMD4.9

In 4.5.2.14.1.2 replace

"4.5.2.14.1.2"

With

"4.5.2.14.1.2 Integration in bitstream".

In 4.5.2.14.2.2 replace

"

| Channel Configuration | dmix_a_idx | dmix_b_idx |
|-----------------------|------------|------------|
| 7.1 Back, 6.1         | d1         | d2         |
| 7.1 Front             | e1         | e2         |
| 7.1 Top               | f1         | f2         |

"

with

"

| Channel Configuration | Multiplication factor of dmix_a_idx | Multiplication factor of dmix_b_idx |
|-----------------------|-------------------------------------|-------------------------------------|
| 7.1 Back, 6.1         | d1                                  | d2                                  |
| 7.1 Front             | e1                                  | e2                                  |
| 7.1 Top               | f1                                  | f2                                  |

"

In 4.5.2.14.2.2.1 replace

"Rs' = Rs × d1 + Rsr' × d2"

With

" Rs' = Rs × d1 + Rsr × d2".

*In 4.5.2.14.2.2.3 replace*

"C, L, R, Ls, Rs, Lv, Rv, LFE are the source signals and C', L', R', Ls', Rs', LFE' are the derived 5.1 channel signals."

*With*

"C, L, R, Ls, Rs, Lv, Rv, LFE are the source signals and C', L', R', Ls', Rs', LFE' are the derived 5.1 channel signals."

*In 4.5.2.14.2.3 replace*

"**dmx\_gain\_5** indicates the correction for 7-channel to 5-channel downmix and **dmx\_gain\_2** for the 5-channel to 2-channel downmix."

*With*

" **dmx\_gain\_5** indicates the correction factor for 7-channel to 5-channel downmix and **dmx\_gain\_2** for the 5-channel to 2-channel downmix."

*And replace*

"In case of downmixing from 7 to 2 channels the gains shall be applied in combination (**dmx\_gain\_5** + **dmx\_gain\_2**)."

*With*

"In case of downmixing from 7 to 2 channels the gains shall be applied in combination (**dmx\_gain\_5** × **dmx\_gain\_2**)."

*In 4.5.2.14.2.3.1 replace*

" $\text{dmx\_gain\_5} = 10 \times (\text{dmx\_gain\_5\_idx}/80)$ , if  $\text{dmx\_gain\_5\_sign} == 0$

$\text{dmx\_gain\_5} = 10 \times (-\text{dmx\_gain\_5\_idx}/80)$ , if  $\text{dmx\_gain\_5\_sign} == 1$ "

*with*

" $\text{dmx\_gain\_5} = 10^{(\text{dmx\_gain\_5\_idx}/80)}$ , if  $\text{dmx\_gain\_5\_sign} == 0$

$\text{dmx\_gain\_5} = 10^{(-\text{dmx\_gain\_5\_idx}/80)}$ , if  $\text{dmx\_gain\_5\_sign} == 1$ "

*In 4.5.2.14.2.3.2 replace*

" $\text{dmx\_gain\_2} = 10 \times (\text{dmx\_gain\_2\_idx}/80)$ , if  $\text{dmx\_gain\_2\_sign} == 0$

$\text{dmx\_gain\_2} = 10 \times (-\text{dmx\_gain\_2\_idx}/80)$ , if  $\text{dmx\_gain\_2\_sign} == 1$ "

*with*

" $\text{dmx\_gain\_2} = 10^{(\text{dmx\_gain\_2\_idx}/80)}$ , if  $\text{dmx\_gain\_2\_sign} == 0$

$\text{dmx\_gain\_2} = 10^{(-\text{dmx\_gain\_2\_idx}/80)}$ , if  $\text{dmx\_gain\_2\_sign} == 1$ "

*In 4.5.2.14.2.2.3 replace*

"

| Data field               | Default value         |
|--------------------------|-----------------------|
| dolby_surround_mode      | "00"                  |
| drc_presentation_mode    | "00"                  |
| center_mix_level_value   | "010"                 |
| surround_mix_level_value | "010"                 |
| compression_on           | "0"                   |
| compression_value        | "0000 0000"           |
| coarse_grain_timecode    | "00 0000000000000000" |
| fine_grain_timecode      | "00 0000000000000000" |
| dmix_a_idx               | "010"                 |
| dmix_b_idx               | "010"                 |
| dmx_gain_5               | "000000"              |
| dmx_gain_2               | "000000"              |
| dmix_lfe_idx             | "1111"                |

"  
with  
"

| Data field               | Default value         |
|--------------------------|-----------------------|
| dolby_surround_mode      | "00"                  |
| drc_presentation_mode    | "00"                  |
| stereo_downmix_mode      | "0"                   |
| center_mix_level_value   | "010"                 |
| surround_mix_level_value | "010"                 |
| compression_on           | "0"                   |
| compression_value        | "0000 0000"           |
| coarse_grain_timecode    | "00 0000000000000000" |
| fine_grain_timecode      | "00 0000000000000000" |
| dmix_a_idx               | "010"                 |
| dmix_b_idx               | "010"                 |
| dmx_gain_5_idx           | "000000"              |
| dmx_gain_2_idx           | "000000"              |
| dmix_lfe_idx             | "1111"                |

"