 AAC Audio Metadata Feature Testset

Introduction

The AAC audio metadata feature testset allows to test if an (HE)AAC decoder correctly applies audio specific metadata, including program reference level, dynamic range control and downmixing. It consists of a number of AAC bitstreams, designed in a way that allows for a rough verification of these features by simple listening to decoder output.

All test items are available both in AAC LC (suffix _LC) and HEAAC (suffix _HE) format. Most test items are available in stereo (suffix _stereo) and 5.1 channel configurations (downmix tests are only available in 5.1).

Test_PRL: Program Reference Level

This test item allows to test if the decoder applies the program reference level.

If the decoder correctly applies the program reference level, the 1kHz tone is output at a constant level (short dropouts may be noticeable every second when PRL changes).

If the decoder does not apply the program reference level, the level of the tone changes every second.

Test_MPEG_DRC: MPEG Dynamic Range Control (DRC)

This test item allows to test if the decoder applies MPEG dynamic range control. For this test the decoder has to be configured to apply full DRC (no scaling of DRC coefficients).

If the decoder correctly applies DRC, the 1kHz tone is output at a constant level (short dropouts may be noticeable every second when DRC gain changes).

If the decoder does not apply DRC, the level of the tone changes every second.

Test_MPEG_DRC_multi: MPEG Multiband (DRC)

This test item allows to test if the decoder applies MPEG multiband dynamic range control. For this test the decoder should be configured to apply full DRC (no scaling of DRC coefficients).
If the decoder correctly applies multiband DRC, a constant tone is output (short dropouts may be noticeable every second when DRC gains change).

If the decoder does not apply multiband DRC, the tone changes every second.

**Test_ETSI_DRC: ETSI Heavy Compression**

This test item allows to test if the decoder applies ETSI heavy compression DRC. For this test the decoder has to be configured to apply heavy compression.

If the decoder correctly applies heavy compression, the 1kHz tone is output at a constant level (short dropouts may be noticeable every second when DRC gain changes).

If the decoder does not apply heavy compression, the level of the tone changes every second.

**Test_MPEG_Dmx: MPEG Mixdown Coefficient**

This test item allows to test if the decoder applies 5.1 to stereo downmixing using the MPEG PCE mixdown coefficient. For this test the decoder has to be configured to apply stereo downmixing.

If the decoder correctly applies the mixdown coefficient, the output signal – a mix of white noise and a 1kHz tone – has a constant level, with an interruption of the tone for one second after three seconds (short dropouts may be noticeable every second when the mixdown coefficient changes).

If the decoder does not apply the mixdown coefficient, the level of the 1kHz tone changes every second.

**Test_ETSI_Dmx: ETSI Downmix Coefficients**

This test item allows to test if the decoder applies 5.1 to stereo downmixing using the ETSI center and surround downmix coefficients. For this test the decoder has to be configured to apply stereo downmixing.

If the decoder correctly applies the downmix coefficients, the output signal – a mix of white noise and a 1kHz tone – has a constant level, with an interruption of the tone for one second after seven seconds (short dropouts may be noticeable every second when the downmix coefficient changes).

If the decoder does not apply the downmix coefficients, the level of the 1kHz tone changes every second.