

Test patterns for ISO/MPEG Layer I

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This directory contains 8 pairs of files with test patterns (one encoded bitstream, generated by a reference encoder and the corresponding decoded PCM output, generated by a reference decoder).

These data are intended for conformance testing of an ISO/MPEG Layer I decoder implementation according to the ISO/IEC international standard IS 11172 (part 3 - audio). The conformance testing is described in part 4 of this standard.

The Layer I test data in this directory has been generated by:

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In the following, you find a description of the test patterns.

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For the input files, one slot (4 bytes in Layer I) is put on one line. Each 4 bits are translated into one hex character, i.e. 8 characters per line.

For the output files, one output sample is put on one line. The samples are represented with 24 bits accuracy, each 4 bits are translated into one hex character, i.e. 6 characters on one line. For stereo output, the left and right output samples are interleaved, so the left samples are on the even lines (starting to count with line 0), the right samples are on the odd lines.

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The information on the bit streams is:

1:     Layer            I  
       Fs             32 kHz  
       bit rate        384 kbit/s  
       CRC            yes  
       mode           intensity stereo  
       signal         -20 dB sweep in left and right  
       #frames        49

       Filenames: f11.mpg (encoded bitstream)  
                  f11.pcm (decoded PCM output)

2:     Layer            I  
       Fs             44.1 kHz  
       bit rate        384 kbit/s

layer1.readme.txt

CRC yes  
mode intensity stereo  
signal -20 dB sweep in left and right  
#frames 49

Filenames: f12.mpg (encoded bitstream)  
f12.pcm (decoded PCM output)

3: Layer I  
Fs 48 kHz  
bit rate 384 kbit/s  
CRC yes  
mode intensity stereo  
signal -20 dB sweep in left and right  
#frames 49

Filenames: f13.mpg (encoded bitstream)  
f13.pcm (decoded PCM output)

4: Layer I  
Fs 32 kHz  
bit rate 32 kbit/s  
CRC no  
mode single channel  
signal -20 dB sweep  
#frames 49

Filenames: f14.mpg (encoded bitstream)  
f14.pcm (decoded PCM output)

5: Layer I  
Fs 48 kHz  
bit rate 448 kbit/s  
CRC yes  
mode dual channel  
signal -1 dB, 1 kHz sine wave in left,  
-1 dB, 2 kHz sine wave in right  
#frames 49

Filenames: f15.mpg (encoded bitstream)  
f15.pcm (decoded PCM output)

6: Layer I  
Fs 44.1 kHz  
bit rate 384 kbit/s  
CRC yes  
mode stereo  
signal noise in left and right  
remark all subbands get all possible allocations  
#frames 49

layer1.readme.txt  
Filenames: f16.mpg (encoded bitstream)  
f16.pcm (decoded PCM output)

7: Layer I  
Fs 44.1 kHz  
bit rate 384 kbit/s  
CRC yes  
mode stereo  
signal special  
remark all scalefactors occur  
#frames 63

Filenames: f17.mpg (encoded bitstream)  
f17.pcm (decoded PCM output)

8: Layer I  
Fs 44.1 kHz  
bit rate 384 kbit/s  
CRC no  
mode stereo  
signal -20 dB sweep in left and right, from 0 to 10 kHz,  
remark for compliance test (see CD 11172-4)  
#frames 49

Filenames: f18.mpg (encoded bitstream)  
f18.pcm (decoded PCM output)

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