\_\_\_\_\_\_

This documentation and its accompanying audio file by <u>Martin Zuther</u> are licensed under a <u>Creative Commons Attribution-ShareAlike 4.0</u> International License.

-----

## FLAC-compressed wave file (44.1 kHz, 24 bit, stereo)

\_\_\_\_\_

Please verify correctness of peak meter and maximum peak meter programmatically. In "ITU-R BS.1770" mode, make sure that measured levels equal the left channel's level.

Given levels describe the left channel. The left channel is delayed by one second, while the right channel's level has been attenuated by 1.93 dB.

```
00:00.000 - 00:02.000 silence
00:02.000 - 00:07.000 square wave ( 20 Hz, -41.0 dB FS peak)
                       [left peak meter should read -21.00 dB (K-20)]
                       [right peak meter should read -22.93 dB (K-20)]
                       [left maximum peak should read -21.00 dB (K-20)]
                       [right maximum peak should read -22.93 dB (K-20)]
00:07.000 - 00:09.000 silence
00:09.000 - 00:14.000 square wave ( 180 Hz, -29.0 dB FS peak)
                       [left peak meter should read -9.00 dB (K-20)]
                       [right peak meter should read -10.93 dB (K-20)]
                       [left maximum peak should read -9.00 dB (K-20)]
                       [right maximum peak should read -10.93 dB (K-20)]
00:14.000 - 00:16.000
                      silence
00:16.000 - 00:21.000
                      square wave (530 Hz, -17.5 dB FS peak)
                       [left peak meter should read +2.50 dB (K-20)]
                       [right peak meter should read +0.57 dB (K-20)]
                       [left maximum peak should read +2.50 dB (K-20)]
                       [right maximum peak should read +0.57 dB (K-20)]
00:21.000 - 00:23.000 silence
00:23.000 - 00:28.000 square wave (1111 Hz, -8.3 dB FS peak)
                       [left peak meter should read +11.70 dB (K-20)]
                       [right peak meter should read +9.77 dB (K-20)]
                       [left maximum peak should read +11.70 dB (K-20)]
                       [right maximum peak should read +9.77 dB (K-20)]
00:28.000 - 00:30.000 silence
00:30.000 - 00:35.000 square wave (1501 Hz, -0.1 dB FS peak)
                       [left peak meter should read +19.90 dB (K-20)]
                       [right peak meter should read +17.97 dB (K-20)]
                       [left maximum peak should read +19.90 dB (K-20)]
```

[right maximum peak should read +17.97 dB (K-20)]

00:35.000 - 00:37.000 silence

00:37.000 - 00:42.000 square wave (2890 Hz, -36.0 dB FS peak)

[left peak meter should read -16.00 dB (K-20)] [right peak meter should read -17.93 dB (K-20)]

[left maximum peak should read +19.90 dB (K-20)] [right maximum peak should read +17.97 dB (K-20)]

00:42.000 - 00:44.000 silence

00:44.000 - 00:49.000 square wave (4190 Hz, -69.5 dB FS peak)

> [left peak meter should read -49.50 dB (K-20)] [right peak meter should read -51.43 dB (K-20)]

[left maximum peak should read +19.90 dB (K-20)] [right maximum peak should read +17.97 dB (K-20)]

00:49.000 - 00:51.000

silence

00:51.000 - 00:56.000 square wave (8345 Hz, -85.0 dB FS peak)

(it seems like I have driven Sound Forge's test tone generator to its limits -- the peak level meter readings given below have been measured using the "Statistics" dialog in Sound Forge)

[left peak meter should read -65.05 dB (K-20)] [right peak meter should read -66.99 dB (K-20)]

[left maximum peak should read +19.90 dB (K-20)] [right maximum peak should read +17.97 dB (K-20)]

00:56.000 - 00:59.000 silence

## **Validation settings**

\_\_\_\_\_\_

File: peak\_meter Host SR: 44 100 Hz peak meter.flac

Channel: RMS: All, ITU-R: 1 [x] Peak meter level Display: [ ] Average meter level [x] Maximum peak level [ ] Stereo meter value

[ ] Phase correlation