
traKmeter

=====

Loudness meter for correctly setting up tracking and mixing levels

Copyright (c) 2012-2013 Martin Zuther (<http://www.mzuther.de/>)

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

Thank you for using free software!

FLAC-compressed wave file (44.1 kHz, 16 bit, 8 channels)

=====

Please verify correctness of peak and average meters visually.

Given levels describe the first channel. The other channels have been amplified in steps of +5.00 dB per channel (first test) and +1.00 dB (all other tests), respectively.

00:00.000 - 00:01.000 silence
00:01.000 - 00:03.000 sine wave (1000 Hz, -60.10 dB FS peak)

[signal meter ch. 1 should not light]
[signal meter ch. 2 should barely light]
[...]
[signal meter ch. 8 should fully light]

```

00:03.000 - 00:04.000  silence
00:04.000 - 00:06.000  sine wave (1000 Hz, -22.05 dB FS peak)

[peak meter ch. 1 should read -22.05 dB] [---]
[peak meter ch. 2 should read -21.05 dB] [LOW]
[peak meter ch. 3 should read -20.05 dB]
[peak meter ch. 4 should read -19.05 dB]
[peak meter ch. 5 should read -18.05 dB]
[peak meter ch. 6 should read -17.05 dB]
[peak meter ch. 7 should read -16.05 dB]
[peak meter ch. 8 should read -15.05 dB]

[RMS meter ch. 1 should read -22.05 dB] [---]
[RMS meter ch. 2 should read -21.05 dB] [---]
[RMS meter ch. 3 should read -20.05 dB] [---]
[RMS meter ch. 4 should read -19.05 dB] [LOW]
[RMS meter ch. 5 should read -18.05 dB]
[RMS meter ch. 6 should read -17.05 dB]
[RMS meter ch. 7 should read -16.05 dB]
[RMS meter ch. 8 should read -15.05 dB]

[maximum meters should not be visible]
[all signal meters should fully light]

00:06.000 - 00:06.500  silence
00:06.500 - 00:08.500  sine wave (1000 Hz, -21.95 dB FS peak)

[peak meter ch. 1 should read -21.95 dB] [---]
[peak meter ch. 2 should read -20.95 dB] [LOW]
[peak meter ch. 3 should read -19.95 dB]
[peak meter ch. 4 should read -18.95 dB]
[peak meter ch. 5 should read -17.95 dB]
[peak meter ch. 6 should read -16.95 dB]
[peak meter ch. 7 should read -15.95 dB]
[peak meter ch. 8 should read -14.95 dB]

[RMS meter ch. 1 should read -21.95 dB] [---]
[RMS meter ch. 2 should read -20.95 dB] [---]
[RMS meter ch. 3 should read -19.95 dB] [---]
[RMS meter ch. 4 should read -18.95 dB] [LOW]
[RMS meter ch. 5 should read -17.95 dB]
[RMS meter ch. 6 should read -16.95 dB]
[RMS meter ch. 7 should read -15.95 dB]
[RMS meter ch. 8 should read -14.95 dB]

[maximum meters should be visible]
[all signal meters should fully light]

```

```

00:08.500 - 00:09.500  silence
00:09.500 - 00:11.500  sine wave (1000 Hz, -15.05 dB FS peak)

                        [peak meter ch. 1 should read -15.05 dB]
                        [peak meter ch. 2 should read -14.05 dB] [HOT]
                        [peak meter ch. 3 should read -13.05 dB] [HOT]
                        [peak meter ch. 4 should read -12.05 dB] [HOT]
                        [peak meter ch. 5 should read -11.05 dB] [HOT]
                        [peak meter ch. 6 should read -10.05 dB] [HOT]
                        [peak meter ch. 7 should read  -9.05 dB] [HOT]
                        [peak meter ch. 8 should read  -8.05 dB] [HOT]

                        [RMS  meter ch. 1 should read -15.05 dB]
                        [RMS  meter ch. 2 should read -14.05 dB]
                        [RMS  meter ch. 3 should read -13.05 dB]
                        [RMS  meter ch. 4 should read -12.05 dB]
                        [RMS  meter ch. 5 should read -11.05 dB]
                        [RMS  meter ch. 6 should read -10.05 dB]
                        [RMS  meter ch. 7 should read  -9.05 dB]
                        [RMS  meter ch. 8 should read  -8.05 dB] [HOT]

                        [maximum meters should not be visible]
                        [all signal meters should fully light]

00:11.500 - 00:12.000  silence
00:12.000 - 00:14.000  sine wave (1000 Hz, -14.95 dB FS peak)

                        [peak meter ch. 1 should read -14.95 dB] [HOT]
                        [peak meter ch. 2 should read -13.95 dB] [HOT]
                        [peak meter ch. 3 should read -12.95 dB] [HOT]
                        [peak meter ch. 4 should read -11.95 dB] [HOT]
                        [peak meter ch. 5 should read -10.95 dB] [HOT]
                        [peak meter ch. 6 should read  -9.95 dB] [HOT]
                        [peak meter ch. 7 should read  -8.95 dB] [HOT]
                        [peak meter ch. 8 should read  -7.95 dB] [HOT]

                        [RMS  meter ch. 1 should read -14.95 dB]
                        [RMS  meter ch. 2 should read -13.95 dB]
                        [RMS  meter ch. 3 should read -12.95 dB]
                        [RMS  meter ch. 4 should read -11.95 dB]
                        [RMS  meter ch. 5 should read -10.95 dB]
                        [RMS  meter ch. 6 should read  -9.95 dB]
                        [RMS  meter ch. 7 should read  -8.95 dB] [HOT]
                        [RMS  meter ch. 8 should read  -7.95 dB] [HOT]

                        [maximum meters should      be visible]
                        [all signal meters should fully light]

00:14.000 - 00:15.000  silence

```

Validation settings

=====

```

File:      peak_meter.flac
Host SR:   44 100 Hz
Channel:   All
Display:   [x] Average meter level
           [x] Peak meter level

```