

# mvMeter2

## Manual



TBProAudio 2018

# 1 Introduction

Welcome to mvMeter2, a multivariable meter including RMS, EBU R128, VU and PPM measurement.

## 2 Features

mvMeter2 offers following features:

- behavior of classic analog VU and PPM meters
- multiple measurement modes: PEAK, RMS, EBU R128, VU and PPM
- multi channel metering: stereo, left, right, mid, side
- single and dual meter display
- adjustable reference level
- adjustable meter delay
- preset management
- adjustable pre-gain, gain matching
- instance label
- large and accurate live meters
- 64-bit internal processing
- 5 different meter themes
- GUI resizing up 400%, ready for 4k displays

### 3 Design

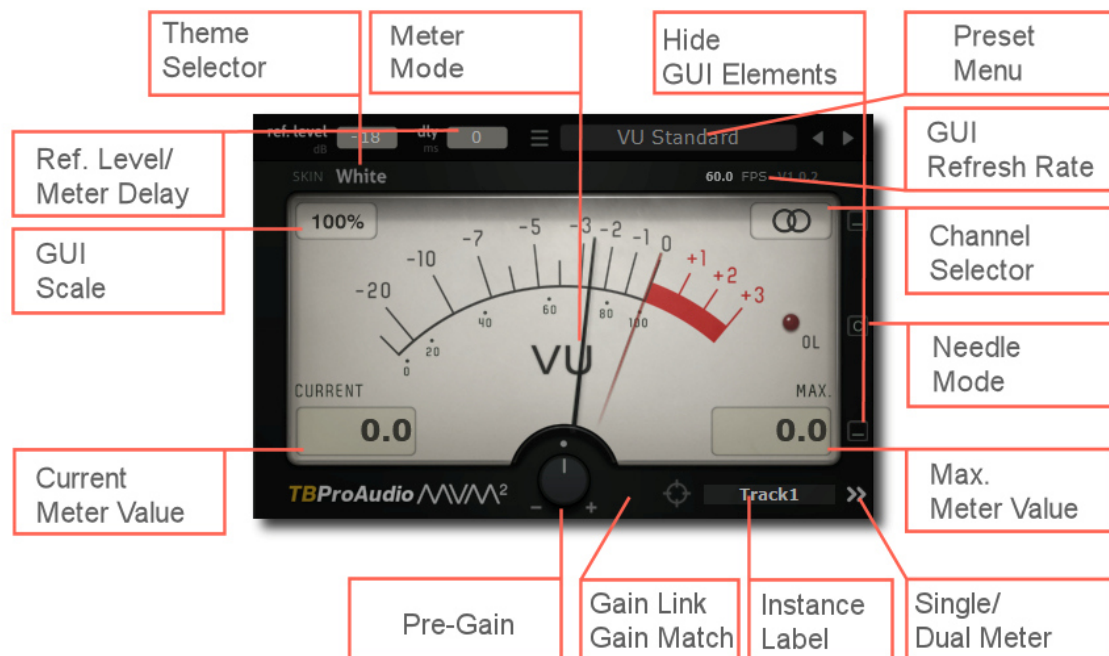
mvMeter2 combines multiple meters into one plugin framed by a classic VU/PPM meter design:

- RMS: 600ms integration time
- RMS+3dB: 600ms integration time, +3dB compensation according to AES-17
- EBU R128-2014: ML and SL loudness measurement
- Classic VU meter with dB and VU scale
- Classic PPM Meter with BBC and EBU scale
- Hold needle
- Current and max value readout
- Overload LED

### 4 Minimum System Requirements

- Windows XP SP3 or newer
- Mac OS X 10.5 or newer
- Win: 32/64 Bit VST, 32/64 Bit VST3, 32 Bit RTAS, 32/64 Bit AAX
- OS X: 32/64 Bit VST, 32/64 Bit VST3, 32/64 Bit AU, 32 Bit RTAS, 32/64 Bit AAX
- Tested with: Cockos Reaper, Steinberg Cubase/Nuendo/Wavelab 6/7/8, FL Studio 12.x, PT10/12
- All sample rates

### 5 Features



Theme Selector: White, Classic, Dark, Retro or Deluxe

GUI Scale: click to select the current GUI size, from 50% up to 400%

GUI Refresh Rate: set refresh rate from 1 to 100 FPS

Channel Selector: click to select the channel mode.

Single meter display: stereo, left, right, mid and side channel.

Dual meter display: left/right, and mid/side channel.

Note for single meter display (stereo channel mode):

Meter modes RMS, RMS +3, VU and PPM: channels are averaged.

Meter modes Peak: channel max.

Meter modes EBU ML, EBU SL: channels are summed (as described in EBU R128 spec)

Current Meter Value: readout of current meter value

Max. Meter Value: readout of max. meter value, click to reset value,

Meter Modes:

Peak:

RMS: 600ms integration time, -20/+3 scale

RMS+3dB: 600ms integration time, +3dB compensation according to AES-17, -20/+3 scale

EBU R128: ML and SL loudness measurement, -20/+3 scale

Classic VU meter with dB and VU scale

Classic PPM Meter with BBC and EBU scale

Pre-Gain: depending on the Channel Selector it controls the volume of the channel, click with right mouse button for numerical input. Double click resets value.

Gain Link: (dual screen only) sets both gain knobs together

Gain Match: matches the max. value with the reference value of corresponding meter mode by adjusting the pre gain value automatically.

single needle mode: pre-gain is calculated based on the max. value

dual needle mode: pre-gain is calculated based on the highest max. value of both channels and set to both pre-gain controls

Instance Label: click on the label to change the name of the plug-in instance.

Needle Mode: click to change the function of red needle, off, current or max. value.

Hide/Show GUI Elements: click to show/hide different controls like GUI scale, FPS, channel mode, current/max readouts, gain link/gain match button.

Ref. Level: sets the reference level in dB(FS) for the current meter mode. E.g. reference level for classic VU meter is -18dbFS

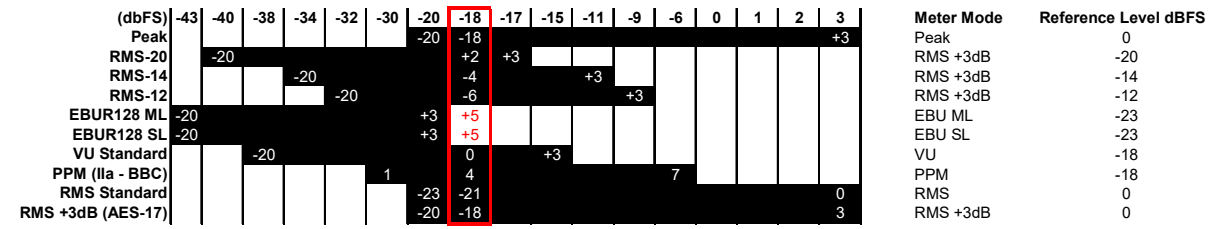
Delay: delays the meter activity so it is time-synced with other busses with different latencies.

Single/Dual meter display: enables either single or dual meter display.

Preset menu: click to enter the preset menu, displays current preset and click to select previous or next preset.

## Presets:

Preset specification



Readout values for 1kHz sinus -18dBFS Peak

## 6 Conclusion

So finally if you have any questions or suggestions just let us know. Enjoy our audio tools and visit us here: <http://www.tb-software.com/TBProAudio/index.html>

Your team from TBProAudio :-)