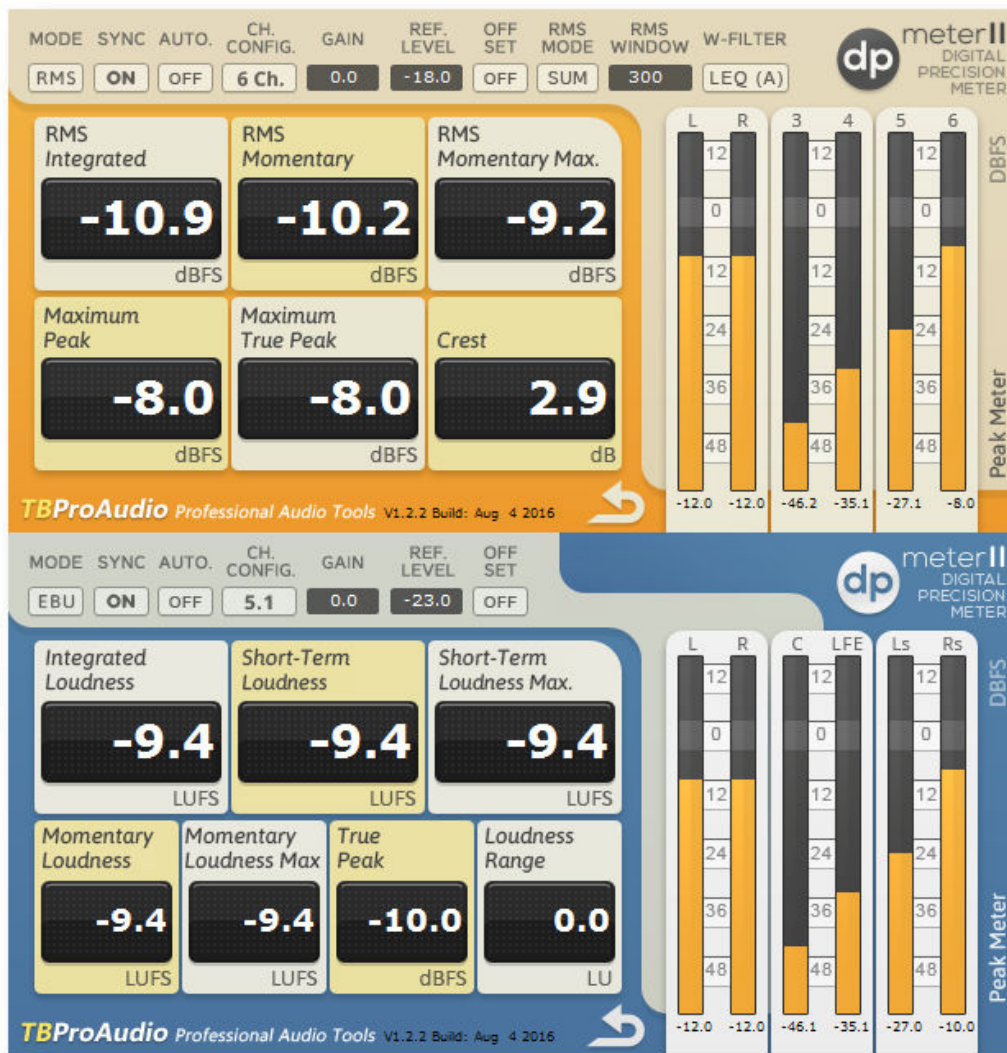


# dpMeter II

## Manual



TBProAudio 2018

# 1 Introduction

Welcome to dpMeter II, a precise digital audio multi channel meter including RMS, EBU R128 and TruePeak measurement.

## 2 Features

dpMeter II offers following features:

- click-free 64-bit internal processing
- measurement modes: RMS/EBU R128
- multi channel metering: 2-6 RMS channels, 2.0 stereo, 4.0, 4.1 and 5.1 surround
- RMS: integrated, momentary, peak and true peak
- EBU R128: integrated, momentary, short term, true pack and loudness range
- true peak measurement based on ITU BS.1770-4
- K/A/B/C/M-weighting filter
- continuous/synced measurement
- record metering results as automation data
- large and accurate live meters
- adjustable pre-gain
- manual loudness/peak/TP match with given reference level
- loudness offset mode

### 3 Design

dpMeter II combines two meter into one and adds manual loudness matching:

- RMS: accurate multi channel RMS meter with variable window size and true peak measurement based on ITU BS.1770-4.
- EBU R128: loudness meter based on EBU R128-2014 including true peak and LRA measurement
- Additional manual loudness/peak/TP match with reference level

### 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 How to use

dpMeter II is designed to reset all internal measurements if significant parameter changes are made. This keeps all displays updated.

dpMeter II uses various graphical elements to control the parameters of the plugin:

#### Value box:

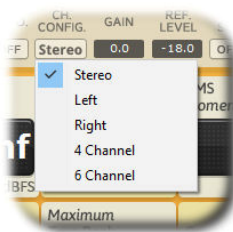


Mouse click and drag up/down changes value of the parameter.

Mouse double click on knob resets value.

Mouse double click on value opens value input box.

#### Popup menu button:



Mouse click opens popup menu.

#### Loudness/peak/TP match

By shift mouse clicking on measurement descriptions the current value will be matched with the reference level.

Example: Max Peak (RMS) shows -6 dBFS, reference level shows -1 dBFS. If you click now with shift key hold on the text "Max Peak", the gain value is automatically set to (+)5 dB.

Now Max Peak should show -1 dBFS.

This is very handy if you want to set the loudness/peak/TP to a certain reference level with just a mouse click.

## **Loudness offset display**

All RMS/IL/ML/SL values are display in to relationship to reference level.

## **6 Plugin Controls**

### **6.1 Mode**

Sets current metering mode: RMS or EBUR128.

### **6.2 Sync**

Measurement can be set either to synced (on) with DAW or continuous (off)

### **6.3 Autom.**

Disable/enable writing of automation data

### **6.4 Reset**



Resets all measurements

### **6.5 (RMS) Config**

Sets channels for RMS measurement, others channels are ignored

### **6.6 (RMS) Gain**

Sets additional gain before measurement, can be set automatically by clicking on measurement description text, depending on reference level.

### **6.7 (RMS) Ref Level**

Set reference level in dBFS/LUFS, is used of manual loudness matching and loudness offset display.

### **6.8 (RMS) Offset**

Enables loudness offset display, all RMS values are displayed in relationship to reference level (in dB).

### **6.9 (RMS) Meter Mode**

RMS Sum: All active channels are summed to a single RMS value

RMS Avg+3: All active channels are averaged to a single RMS +3dB value

RMS Avg: All active channels are averaged to a single RMS value

### **6.10(RMS) RMS Window**

Sets RMS window size, 10ms to 5000ms, default 300ms

### **6.11(RMS) Weighting Filter**

Sets IT1170, A, B, C, M A+3dB weighting filter.

### **6.12(EBUR128) Channel Config**

Sets channels for EBUR128 measurement, others channels are ignored

(C) TBProAudio 2018

### 6.13 (EBUR128) Gain

Sets additional gain before measurement, can be set automatically by shift mouse click on readout value, depending on reference level.

### 6.14 (EBUR128) Ref Level

Set reference level in dBFS/LUFS, is used of manual loudness matching and loudness offset display.

### 6.15 (EBUR128) Offset

Enables loudness offset display, IL/ML/SL values are displayed in relationship to reference level (in LU)

### 6.16 Automation Data

Metering results could be recorded by DAW as automation data (if enabled):

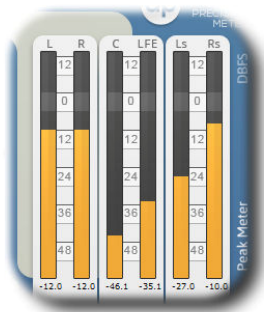
RMS:

OUT:RMS IL, OUT:RMS ML, OUT:RMS ML Max, OUT:RMS Peak Max, OUT:RMS TP Max, OUT:RMS Crest

EBUR128:

OUT:EBU IL, OUT:EBU ML, OUT:EBU ML Max, OUT:EBU SL, OUT:EBU SL Max, OUT:EBU TP, OUT:EBU LRA

### 6.17 Meter



Meters for up to 6 input channels. In RMS mode peak values are displayed, in EBUR128 mode true peak values are displayed. LED signal meter range is from -60dBFS to +12dBFS, in 3dB steps. Value below meter shows maximum value. If signal clips (above 0dBFS) top LED lights red. Mouse click on one of the meters resets max. values.

## 7 Conclusion

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

Your team from TBProAudio :-)