# FinalLoud 2

## Loudness and
## True Peak Finalizer



# MANUAL

**TBProAudio**

2020

# 1    Introduction

**FinalLoud2** is a plugin that helps you to solve quickly a very common challenge in audio engineering: reaching a certain **target loudness level** for any audio material while maintaining given **True Peak ceiling**.

**FinalLoud2** combines an accurate loudness meter (based on the free **dpMeter 4**) with a gain control and a high quality True Peak limiter (based on **LAxLimit2**).
The gain control pushes the loudness level to the target level and in parallel the limiter ensures the True Peak ceiling.

## 2  Features

FinalLoud2 offers following features:

- 5measurement methods: EBU IL/SL Max, RMS IL/SL Max, Dialog
- Adjustable reference level
- Adjustable True Peak ceiling level
- Loudness measurement based on EBU R128-2014
- Dialog gated IL according Dolby Labs reference code
- True Peak measurement based on ITU BS.1770-4
- Automatic sync of measurement with DAW start/stop
- Preset management
- Many useful presets
- Large and easy to use GUI
- 64-bit internal processing

## 3 Overview



FinalLoud2 Overview
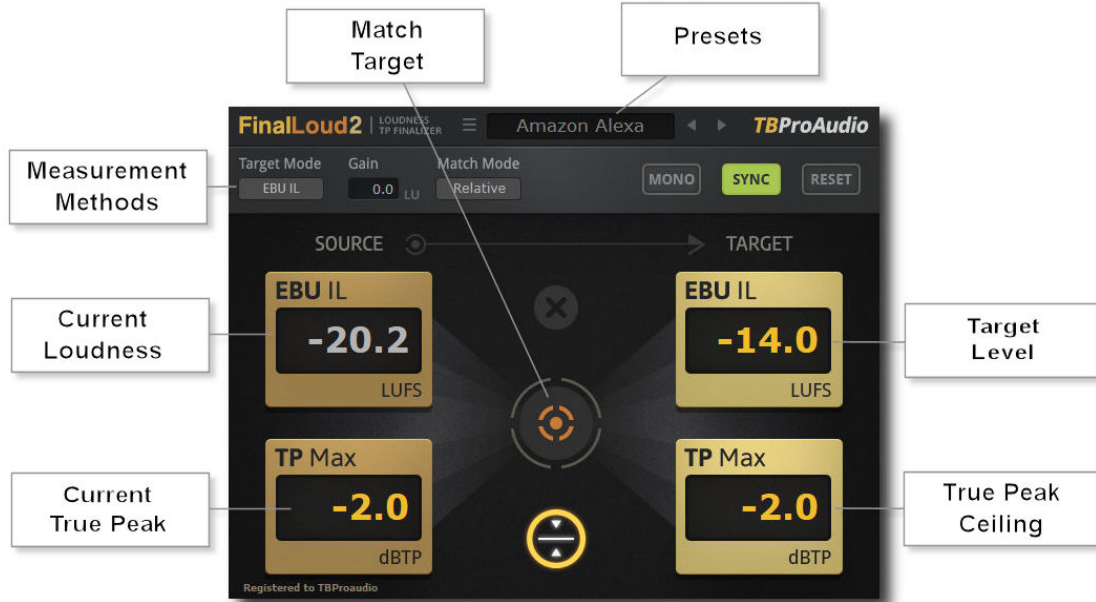
Presets

This control manages factory and user presets.

Measurement Methods:

Measurement methods are based on EBU R128-2014, ITU BS.1770-4. Differently to the mentioned standards FinalLoud2 works with variable target levels.

**EBU IL**: EBU R-128 Integrated Loudness
**EBU SL Max**: EBU R-128 Max Short-Term Loudness
**RMS IL**: RMS Integrated Loudness, channel sum
**RMS SL Max**: RMS Max Short-Term Loudness, 600ms, channel sum
**DIAL:** Integrated loudness gated according Dialog measurement (Dolby Laboratories)
(Dialog measurement sample rate 44100/48000Hz only)

**True Peak**: True Peak measurement is according to ITU BS.1770-4.

Gain

Controls additional input gain. Automatically set by loudness match process.

Match Mode:
*Relative* (default): with click on the match button the gain difference is added to the current gain value. This is useful if you need to run FinalLoud2 several times to reach the target loudness.
*Absolute*: if you do in place rendering with FinalLoud2 please use this mode. In this mode click on the match button sets the current gain difference as gain.

Force Mono: if you working with mono files switch this button on. It ensures that only one channel is processed.

Sync: If enable FinalLoud2 syncs with start/stop state of the DAW and resets meters before DAW starts playing.

Reset
Resets the current measurement.

Source Loudness (RMS/EBU
Dependent on the selected measurement method the readout shows current EBU IL/EBU SL/RMS IL/RMS SL.

Source True Peak Max
This readout shows the current max True Peak value.

Target Loudness (RMS/EBU)
This control sets the target loudness level for the different measurement methods.

Target True Peak Max
This control sets the ceiling of the True peak limiter.

Match
Press this button to match the current loudness value with the target level, dependent on the selected measurement method. The loudness difference is then reflected by the gain value.

Limit
Toggles build-in limiter.

Mouse usage:

Click and drag horizontally changes parameter value
Shift click and drag changes parameter value faster
Ctrl click and drag changes parameter value slower
Alt click rests to default value
Double click or right click open value edit box, finish with enter.

FinalLoud Logo:
Click on the logo open the plugin help menu: about box, online manual, change log and toggle tool tips.

## 4 Usage

This chapter shows you in 4 simple steps how you match the loudness of your audio with a given loudness target level and maintain the True Peak ceiling.

Example: You need to produce an audio file for Amazon Alexa®. This means your audio needs to have a loudness level of **-14LUFS**. The True Peak value should not exceed **-2dBTP**.

# TBProAudio FinalLoud2: Usage

**1)** Select desired preset (e.g. Amazon Alexa®) and make sure that the button "Sync" is activated. Set the time-locators of your DAW according to the audio file and let the audio file play from start to end.

**2)** As soon the DAW stops hit the "Match" button. **FinalLoud2** calculates the gain difference to the target level and sets the gain accordingly.

**3)** Play the audio file again. The meter value "EBU IL" should read now -14LUFS and "TP Max" should not exceed -2dBTP (Amazon Alexa®)
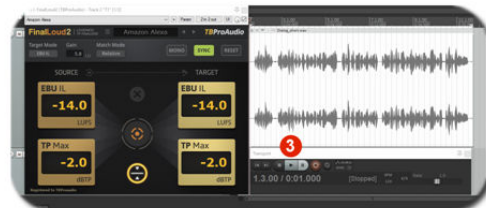
## 5 Minimum System Requirements

- Windows XP SP3 or newer
- Mac OS X 10.9 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 6/7/8/9/10, FL Studio 12.x/20.x, PT10/12/2018, Reason 9.5/10, Studio One, Ableton Live

# 6  Demo mode versus Registered mode

In demo mode (without registering) the plug-in mutes the audio stream every 90 seconds for a short period. This could be circumvented by clicking on the "TBProAudio" logo within 90 seconds.

You can register your product here: http://www.tb-software.com/tbproaudio.

# 7  Registration/Activation

This plugin must be registered and activated in order to be fully functional. You can purchase the license key here: http://www.tb-software.com\tbproaudio.

After purchase, you will receive the license key packed in a zip file by email. Unzip the license file to a suitable location on your PC (e.g. desktop). The license file is called "product name.license". Add the plug-in to any track in your DAW, click on the text "Demo: Click here to activate it" and select the license file. Remove the plug-in in your DAW and add it again. The GUI now says "Registered to your name".

# 8  Terms

**IL**: integroated/program loudness, defined in EBU R128-2014 specification
**SL**: short term loudness, 3sec window, defined in EBU R128-2014 specification
**RMS**: root mean square, no pre-filter
**RMS IL**: RMS integrated/program loudness, no pre-filter
**RMS SL**: RMS short term loudness, no pre-filter, 600ms window
**LUFS**: loudness unit full scale, equivalent to dBFS, refereed to 0 level, signal is K-filter – weighted
**DIAL IL:** Integrated loudness gated according Dialog measurement (Dolby Laboratories, codes bases on https://www.dolby.com/us/en/technologies/speech-gating-reference-code.aspx)
**dBTP**: full scale True Peak, refereed to 0 level, un-weighted signal

# 9  Trademarks

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# 10 Conclusion

So finally if you have any questions or suggestions please let us know.

Your team from TBProAudio :-)