

There are a lot of loudness meters out there and we thought it would be interesting to see which ones are in common usage and why. Please do share your thoughts in the comments and vote for the Pro Tools compatible loudness plug-in that is compatible with Pro Tools in the poll.

The criteria to be in this poll is that the plug-in must be able to measure loudness in LU or LKFS in Momentary, Short Term and Integrated and must be available as an AAX plug-in so it can be used in Pro Tools.

We are going to list them in alphabetical order....



#### **Avid Pro Limiter**

Although not primarily a loudness meter, its primary role is a true peak limiter plug-in it also includes a fully functional loudness meter with a histogram display. However, it only displays loudness in the EBU R128 standard, so for anyone outside the EBU area, it is a useful guide but will not display loudness according to your local standard. You can watch our post-production orientated review of the Avid Pro Limiter.

## **Dolby Media Meter**



As an AAX plug-in for Avid Pro Tools, the Dolby Media Meter plug-in is designed to measure loudness in real time, allowing you to track levels during the mixing process to help meet network delivery requirements. Real-time versions can simultaneously display short term and integrated loudness levels with or without Dialogue Intelligence.



# Grimm Audio LevelView

LevelView is a real-time loudness meter. Its 'Rainbow meter', based upon the 'Bendy Meter' concept of BBC Research, is designed to give the user continuous insight into recent loudness levels of the program material. The arcs of the rainbow all have different integration times: the outer ring shows loudness of the last 3s, every step inward triples the time span.



# HOFA 4U Meter, Fader & MS-Pan

The HOFA plug-in is part of their free 4U Suite, so nothing is going to beat this one on price. Although you can only have one loudness meter in an instance of the plug-in, there is nothing stopping having 3 instances; one with the Integrated, a second with Short Term and a third displaying Momentary. Like the Avid Pro Limiter, it only displays the EBU R128 scale so it is great for UK and Europe and any other territory that adopts the R128 standard. But it is still a useful guide for any other territory as the various versions of the standards are very close to each other. This free plug-in suite also has much going for it too.



# iZotope Insight

iZotope's Insight is a comprehensive metering suite for post production and broadcast applications. Insight provides an extensive set of audio analysis and metering tools, including a loudness section with full history, logging and automation features. Insight, of course, is much more than just a loudness meter with 2D and 3D Spectrograms, True Peak Meters, Stereo Vectorscope, Surround Scope, and Spectrum Analyser as well.

In this <u>free video tutorial</u>, Mike shows the essentials of using the iZotope Insight plug-in on Pro Tools for loudness compliant metering and explain how to ensure your mix meets the latest standards, such as BS 1770-3, ATSC A/85, EBU R-128 and more.



#### **Klangfreund LUFS**

This is a plug-in designed to measure and adjust the loudness similar to the human perception of loudness. Compliant with EBU R 128, ATSC A/85 and more. It is designed to help the user to create initial faders up mixes and to compare with reference tracks on equal loudness.

When mastering an album, a proven strategy is to bounce/export your work to an audio file and put it into a new project. Together with some reference tracks, each one on a separate audio track. Use the solo feature of your workstation to listen to the individual tracks. Take notes about possible improvements in your own work. Go back to your original project and work on these issues.

There is one catch though. A slightly louder track sounds better to the human ear (Even without knowingly noticing that it is louder). That's why it is important that all the tracks in the comparison are equally loud. Guess what? The LUFS Meter takes care of this.



## **Mastering The Mix Levels**

Metering plug-ins can be really difficult for non-technical people to understand so mastering engineer Tom Frampton from Mastering The Mix teamed up with developers 29 Palms to take a completely different look at a metering plug-in for mixing and mastering that creatives could easily understand and LEVELS is the result.

As a mastering engineer Tom Frampton has plenty of experience of having to deal with issues on tracks clients sent to him to master, and that got him thinking, could he design a plug-in that would alert mixers and producers to those common problems and help them resolve those issues at the mix stage rather than at the mastering stage where it can be much harder to solve because all you have is the stereo mix file.



### Melda Production MLoudnessAnalyzer

MLoudnessAnalyzer is a free EBU R128 and ITU-R BS 1770-3 compliant loudness meter. It contains a peak meter, momentary, short-term and integrated loudness meters and a loudness range meter. Supports EBU+9, EBU+18 and EBU+27 scales.



## **MeterPlugs LCAST**

LCAST has been designed to make it easy to take loudness and true-peak measurements. It supports all the major loudness standards and has presets for the most popular ones: ATSC A/85 (CALM Act), ITU BS.1770 and EBU R128. Mono, stereo and surround formats are all compatible (surround only available in LCAST Surround).

If your DAW supports offline processing (e.g., Pro Tools' AudioSuite, offline bouncing, etc.), LCAST can be used to quickly calculate integrated (programme) loudness, loudness range and other measurements. This is ideal for long content including film, albums and TV shows.



## Nugen Audio MasterCheck and MasterCheck Pro

MasterCheck Pro is designed to be the complete solution for optimising your mixes for today's music delivery services. Streaming apps, download stores, websites and podcasts all use data compression, loudness matching or both. These processes can affect your mixes in various undesirable ways: your loud punchy mix could end up quiet and flat, or suffer clipping or distortion. The good news is you don't just have to mix for CD and hope for the best. MasterCheck Pro reveals problems ahead of time and enables you to deliver masters perfectly tuned for specific playout systems.

With MasterCheck Pro you can hear how your tracks are affected by loudness matching algorithms on different devices and services, and you'll know how your masters respond to different codecs and bandwidths.

With MasterCheck Pro's Loudness and PLR features are designed to help you find the sweet spot between perceived loudness and dynamics, perfectly tuning your master to the format.

#### Nugen Audio VisLM2



This is Mike's preferred loudness meter, it does everything I need it to do, I like the way it displays the data and that I can colour it and resize the window to suit my screen real-estate.

The Rewritable Memory Edit Mode is absolutely amazing. It enables me to make small corrections to a mix and not have to re-analyze the whole programme. I also love the way I can resize the window and all the additional options they have added to the plug-in.

For people working in film production and especially trailers, Nugen Audio has now included the Leq measurement that is included in the trailer delivery spec for specifying loudness of film trailers.

VisLM-H2 is designed to promote an efficient workflow with the ability to drill down to any level of complexity the context demands. With VisLM-H2, your loudness workflow can be integrated into the production environment. With a fully resizable interface and many additional visualisations, it's even simpler to identify exactly the information you need and choose the configuration that matches your workflow precisely.

Track Master 1 b RTW Loudness Tools	Preset 2ch R128 Loudness		BYPA55 Native								
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3		,	_		6	l:	1.3 LU				
10						LRA:	3.6 LU				
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Reference and the second											

## **RTW Loudness Tools And Mastering Tools**

RTW Loudness Tools offers metering and loudness display plug-ins for mono, stereo, multichannel, and surround applications up to 7.1 at sampling rates up to 96 kHz. All the widely used Loudness, PPM and TruePeak measurements and scales are offered in Loudness Tools.

Anyone who is familiar with RTW's hardware meters like the TM3, TM7 or TM9 will be at home with these plug-ins. With their 50 years of experience, you will see that the hardware and software products use the same model and RTW have worked hard to make configuration and operation as similar as possible.

#### TC Electronic LM1n, LM2n & LM6n



TC Electronic's LM1n displays the key numbers for Program Loudness (I) and either Loudness Range (LRA), Max Momentary Loudness (M), Max Short Term Loudness (S) or Sliding Loudness (10 Sec) as well as True-Peak clipping. TC Electronic developed the LM1n as a simpler solution for those who have found that they sometimes need to deliver content that complies with a certain broadcast standard, including outside broadcast production workflows.

The LM2n and LM6n are almost identical. In fact, there are only two things that set them apart: channel format compatibility and logging. The LM2n measures any mono or stereo signal while LM6n supports mono, stereo and 5.1 surround, but they both use a clever radar display for the loudness history and offer a number of new features such as dedicated settings for Max Momentary (M) or Max Short Term (S) Loudness display as well as offering a 'Big' version of the Radar, which is very useful when working at a distance from the screen.

The LM6n also features detailed logging for documenting delivery specs in accordance with major broadcast standards, which is key when producing content for broadcast.

	EBU R-128 LUFS 18*									
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True Peak -58 -48 True Peak Limit ON Gain -18 mmm		-30 -25 -20 -10	<u>-15</u> -10 _5	dBTP -5 0 2 GR dB -3 -1 -3 -1 Trim	-1.0 -3.5					
POST PRODUCT SAVE	Method EBU LM1 DIAL Channel Stereo V Weighting ITU 1770 V	Short Time Short Max Short Min True Peak Max Target	3 sec  -18.0 -31.0 M -23.0	LPF 19 HPF 1 omentary LUF Scale	Filtering req Slope 5000 0 50 0 \$ 18dB 🗸					

## Waves WLM And WLM Plus

The Waves WLM Plus is a popular loudness meter that covers many bases although it doesn't have any histogram display. The upside of this is that the plug-in's GUI takes up less screen real estate.

The Waves WLM Plus Loudness meter that adds a True Peak Limiter and a Trim option, to their WLM loudness meter. They both provide loudness measurement, metering, correction and adjustment tools for broadcast, movie trailers, games, packaged media and more. Fully compliant with all current ITU, EBU and ATSC specifications, the WLM Plus offers Momentary, Short Term, Long Term and True Peak readouts, as well as a warning and logging system that keeps track of your levels, alerting you when you've exceeded them - or fallen short.

WLM Plus also features Gain and Trim controls for correction of loudness levels and a True Peak Limiter, which can save you needing to utilise additional equipment or software.

## Youlean Free Loudness Meter



#### zplane PPMulator Plus



This is a low-cost solution from zplane that also has the advantage of taking up very little screen real estate, but doesn't include a histogram feature. It can be set to EBU R128 or either of the 2009 or 2013 versions of ATSC A/85 standards and so between these, it covers the loudness delivery specs for most of the world.

PPMulator is a cross-platform plug-in meter, which also exactly mimics the look and feel of a professional broadcast Peak Programme Meter (PPM) in a variety of broadcast formats. This plug-in provides a calibrated workspace for recording, editing, mixing and mastering and is much cheaper than a hardware meter,

PPMulator also offers batch audio file processing and is one of the cheaper Loudness meter solutions too, except for the free plug-ins.