

true:balance

Tap the power of spectral balance

Welcome to true:balance 3
Install 4
Authorization 5
User interface 6
Key Readouts 7
Spectrum Display 8
Spectral References 9
Common References 10
Channel Data Section 11
Width & Correlation 12
Output Meter 13
Balance Check 14
Mono Check 15
Presets 16
Settings 17

true:balance is spectral analyzer plug-in that makes it easy to compare the spectral distribution of your mix in reference to different spectral targets. Additionally, the plug-in provides you with information on the width and correlation of your track that will help you to avoid issues with mono compatibility or a blurry low end.

Grab true:balance whenever you need reliable insights into the overall balance of your mix. You can use its common genre references or load custom reference tracks for comparisons. Plus, true:balance assists you with suggestions for modifications your track might need in order to match the spectral distribution of your chosen reference. If you appreciate additional guidance, just use the check features to get suggestions for modifications to rectify issues.

Get started with true:balance and have fun getting your track ready for its big release.

System requirements

CPU
Intel Core i5
Apple M1

RAM
4GB

Operating systems
Windows 10+ (64 bit)
Mac OS 10.12+

Graphics
OpenGL Version 3.2+

⚠ You will need admin privileges to successfully install the true:level plug-in.

Mac OSX

To start the installation process, please open the disk image **sonible_truebalance_osx_x.x.x.dmg**. This will mount the image and open a finder window showing the content of the installation package.

To install true:balance on your system, run the installation file **truebalance.pkg**.

The installer will now guide you through the necessary steps to install true:balance on your computer. true:balance will automatically be installed in the default locations for audio plug-ins.

Default folders:

Audio Unit
`/Library/Audio/Plug-Ins/Components/`

VST
`/Library/Audio/Plug-Ins/VST/`

VST3
`/Library/Audio/Plug-Ins/VST3/`

AAX
`/Library/Application Support/Avid/Audio/Plug-Ins/`

Windows

To start the installation process, extract the downloaded zip-file **sonible_truebalance_win_x.x.x.zip** onto your hard disk and run the installer.

The installer will now guide you through the necessary steps to install true:balance on your computer. true:balance will automatically be installed in the default locations for audio plug-ins.

Default folders:

VST3
`C:\Program Files\Common Files\VST3\`

VST
`C:\Program Files\Common Files\VST\`

AAX
`C:\Program Files\Common Files\Avid\Audio\Plug-Ins`

Licensing system

You can select between two licensing systems: machine-based or iLok (USB dongle).

By creating a user account on www.sonible.com and registering your products – if they are not already visible in your Dashboard, you can manage your plug-in activations.

Machine-based

Each license key allows you to install true:balance on two computers with unique system IDs. These system IDs are computed during license activation.

The same license can be used by multiple users, but each user has to individually unlock the full version of true:balance under their account.

In case a system-ID is changed (e.g. replacement of the hard drive), you can revoke/activate the plug-in next to the respective system-ID in the Dashboard of your sonible user account.

iLok

If you want to transfer one activation to your iLok, just make sure the plug-in is registered in your sonible user account. Click on the button „transfer to iLok“ next to the plug-in in your Dashboard and follow the instructions.

Note: 1st gen iLok dongles and the iLok Cloud are currently not supported.

Unlocking

If you purchased a license for true:balance online, you receive your license key via email.

Machine-based unlocking

When opening true:balance for the first time, a notification window will be displayed asking you to unlock true:balance with a valid license key.

Please make sure that your computer is connected to the internet before starting the registration process.
Enter your license key and click „register.“ The plug-in will now communicate with our server to check if the license is valid. If it is – enjoy! :)

iLok

If you transferred your license to an iLok, simply attach the iLok to your computer. The plug-in will then be automatically registered – enjoy!

If you don’t receive the email within minutes please check your junk folder first before contacting our support (**support@sonible.com**).

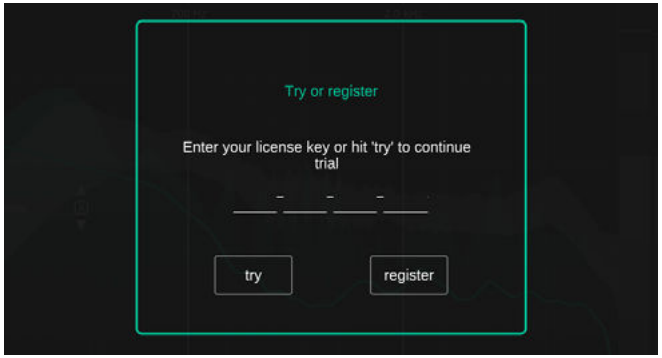
Trial version

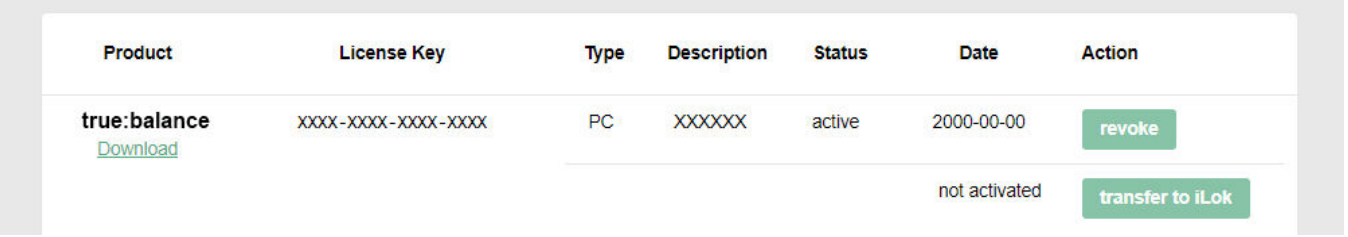
To run true:balance in demo-mode, simply click ”try” and you will then be able to use true:balance for a couple of days without any limitations. (Please refer to our website to find out more about the current demo period of true:-balance)

When the demo period expires, you will need to purchase a full license in order to continue using the plug-in.

Internet connection requirements

sonible plug-ins only needs an internet connection during the trial period and for initial license activation. During the trial period, the plug-in needs to go online every time it is used. Once the license of your plug-in has successfully been activated, an internet connection is no longer needed.







Reference Dropdown
Select a genre for easy comparison with typical spectral references.

Key Readouts
Monitor the average levels and deviations from the chosen reference in the low, mid and high frequency range.

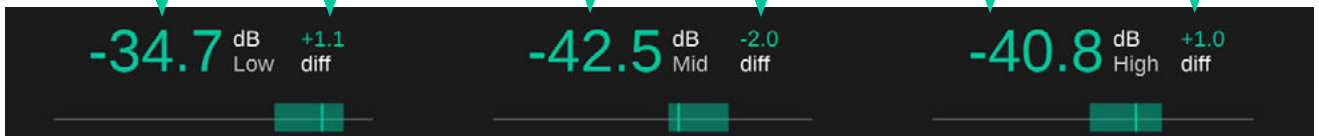
Reference Tracks
Load up to 8 reference tracks for easy comparison with existing mixes.

Spectrum Display
Observe the real-time (average) spectrum and compare it to the distribution of your chosen reference.

Metering Section
Monitor the peak and RMS value of your track.

Channel Data Section
Check the width and correlation of your track to avoid mono compatibility issues.

The spectral balance of a track is all about the overall level-relation of different frequency regions and not necessarily about the exact spectral shape. Three readouts showing the average levels in the low, mid and high frequency range help to focus on these key level-relations.



Key Readout Value

The key readout value shows the average level within the respective frequency range.

Difference Value

The number next to each readout value indicates the deviation from the selected reference. Target indicators below each readout value show the level in relation to the chosen reference.

Target Indicator

Target indicators below each readout value show the level in relation to the chosen reference.

The indicator and the readout both turn green if the measured value meets the value of the reference.

Spectrum Display

The spectrum display provides detailed real-time information about the spectral distribution of a mix. To account for the human perception of levels in different frequencies, the analyzer uses a perceptually motivated frequency summing that leads to a bathtub-like distribution for pink noise and an upwards slope in high frequencies for white-noise-like signals. Narrow-band signals (e.g. sine waves) will have a constant level across all frequencies. This weighting helps to better represent critical level differences as perceived by a mixing engineer.

Average Spectrum

The long-term average spectrum of the observed signal is represented by a green line. It is computed by recursively averaging the short-term spectrum over windows of approximately 10 seconds. This average spectrum is used to compare the track with the chosen references in the key readout section.

Reference Zone

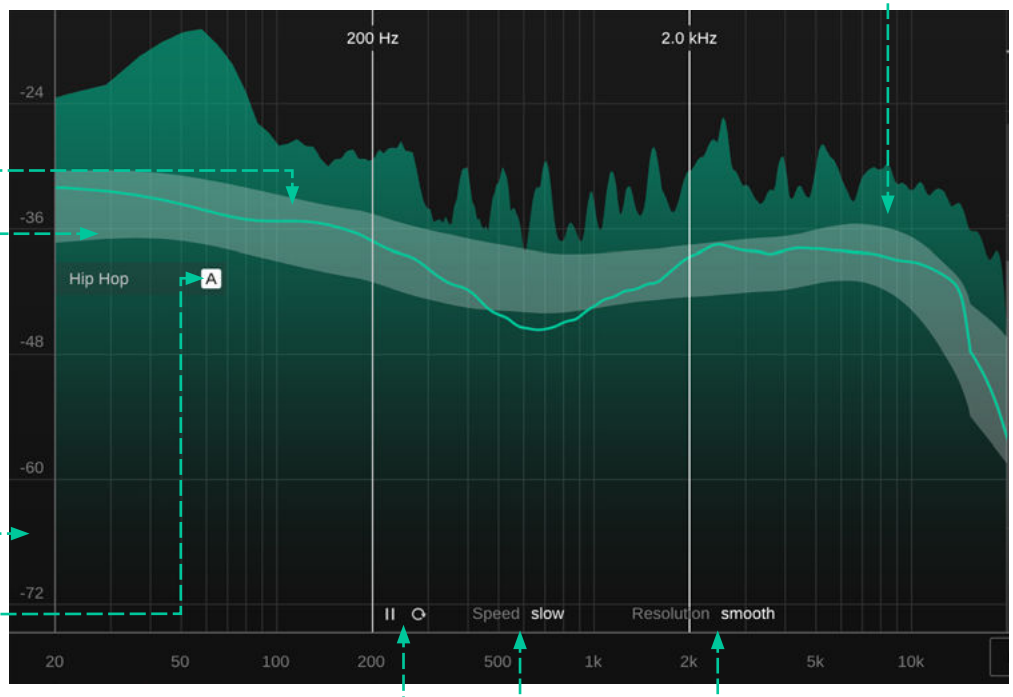
If a reference is loaded, true:balance displays a reference zone inside the spectrum display as a gray background. This reference zone helps to intuitively compare the current track with the spectral distribution of a chosen reference.

Reference Anchor

Since the shape of the spectral distribution is independent of the absolute level of a signal, the reference zone is per default in “follow-mode”. An active follow-mode is indicated by a filled “A” button inside the reference anchor. In this mode the reference zone automatically follows the current signal level and slowly moves up and down with the energy of the input signal.
The automatic follow-mode can be disabled by dragging and dropping the reference anchor to any fixed level. In this fixed mode, the reference zone does not move with the signal energy. This mode can help to hit a fixed target, for example when trying to hit similar overall levels for multiple tracks.

Real-time Spectrum

The real-time spectrum shows the spectral distribution of the signal. The analyzer mode can be switched between real-time, peak-hold and average.



Pause/Reset

Click these buttons to pause or reset the measurement.

Level Scale

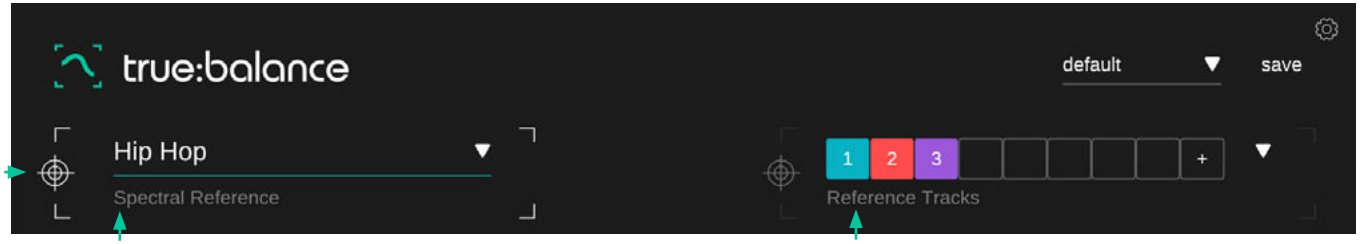
Drag the level scale up or down to adapt the display range to your signal.

Speed and Resolution

To adapt the spectral display to your needs, you can select an averaging time (slow, mid, fast) and a frequency resolution (smooth, medium, detailed) for the average spectrum and the reference zone.

While true:balance can be used as a classical spectrum analyzer, its main strength comes into play when comparing a mix to different spectral references, like the typical spectral distribution of different common genres or the average distribution of multiple reference tracks.

true:balance provides two simple, yet precise ways to compare the qualities of a mix with references:



Reference Selector

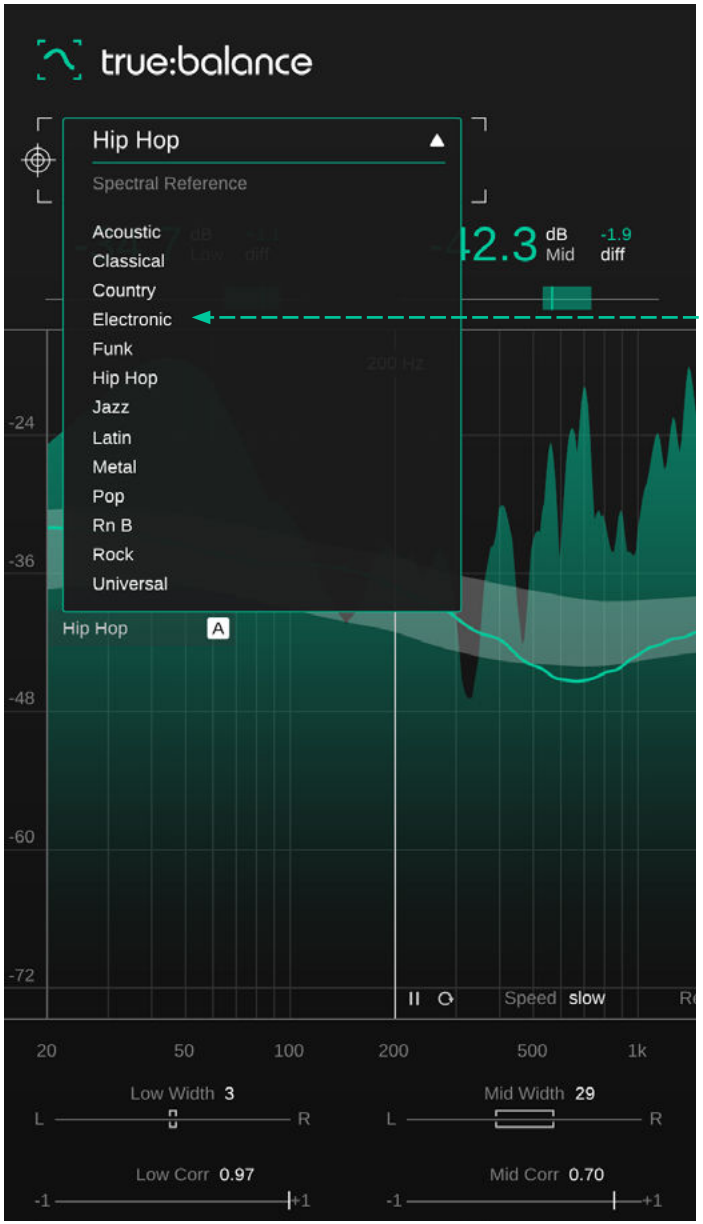
By clicking the reference selector, you can define if the common references, or the reference tracks should be used as the current spectral reference targets. The common references provide an extensive list of predefined references based on the typical spectral distribution of different genres. The references make it easy to see if a track meets the average spectral characteristics of a certain genre.

Common References

predefined genre-based spectral distributions

Custom Reference Tracks

user-defined reference tracks that create custom reference targets



For example, if you are producing an EDM track, you can select the “Electronic” genre as reference and compare your track with it. If your track meets the reference in the mids and highs, but overshoots in the low end, it indicates that you should probably tame your bass or kick a bit. Note that it will take a couple of seconds until changes made to your signal will be reflected by the green average spectrum line.

The lower section of true:balance focuses on the width and correlation of the analyzed signal. The values are computed for the overall signal as well as the three frequency regions low, mid and high.

While a good spectral balance is essential for a great mix, it's also important to make sure that the overall sound and feeling of a (stereo) mix remains intact when played back in mono. Checking the width and correlation helps to identify potential mono-compatibility issues or spatial balancing problems in the mix.



A mono signal is generated by summing the left and right channel of a stereo signal. This loss of the width layer means, that all signals covering a certain frequency region are now all coming from the same direction and are no longer separated by their spatial distance to each other. The collapse of all sources into one location can lead to problematic masking effects. A mix with clearly distinguishable sources on stereo may sound muddy in mono and quiet components may even be fully masked by competing sources.

Besides, problematic temporal relationships between similar signal components on both channels can lead to phase-cancellation issues and the so-called comb-filtering effect. A comb-filter emerges when two signals are summed together that carry similar frequency-components with a problematic phase-shift (e.g. 180°). These frequency components will cancel each other out when summed together, leading to a metallic and hollow sound.

Width

The width indicates how wide the stereo image will be perceived. A very low width indicates that most of the signal's energy is coming from the center (this is typically a good idea for the low end), while a very high width shows that a lot of signal energy is coming from the sides.

Width Indicators

The bracket inside the indicator corresponds with the current width of your track in the respective frequency range.
The location of the bracket indicates the left-right balance of the signal. The main width value shows the overall width of the signal.

Make sure that your low-end is very narrow or mono.
Since very low frequencies are non-directional when played back, you should always try to keep them mono. Bass signals in stereo are particularity prone to phase-cancellation issues – so always make sure that the width of your bass is not unnecessarily wide.

Be careful with extremely wide panning.
The further left or right a signal is panned in the stereo mix, the better that sources overlapping in frequency are separated by the additional layer of width. If you listen to your mix in mono and realize that one of your sources suddenly disappears, you may try to pan them closer to the center in the stereo mix (reduce the width).



Correlation

The correlation value is a metric for the "similarity" of two signals. Hence, it's a good indicator for the perceived width of the mix and for spotting potential phase-cancellation problems.

The section will be deactivated, if the input is a mono signal.

Correlation Indicators

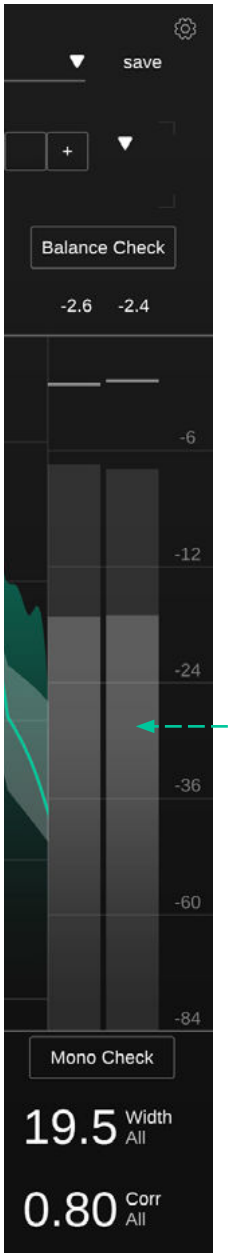
The indicator shows the current correlation in the respective frequency range.
The correlation value shows the overall correlation of the signal.

Although the actual correlation value of a signal heavily depends on the mix (instruments, number of sources etc.), it's good to keep the following rules of thumb in mind when analyzing a mix:

The closer the value is to +1, the more similar are the left and right channel and the smaller is the perceived width of the signal.

The closer the value is to zero, the more unrelated are the left and right channel and the larger is the perceived width. Close to 0, the signals become very wide and summing may cause unwanted frequency masking.

All signals with a correlation below 0 indicate out-of-phase components that will typically lead to unwanted phase cancellation effects if the signals are summed to mono. So negative correlation values should always be avoided if you want a signal to be mono-compatible.



The output meter displays the current peak and RMS value for each channel. The small number above the meter shows the current RMS value.



The balance check feature analyzes the current spectral distribution of your signal and compares the result with the balance of the chosen reference target. Based on the analysis, small info boxes let you know if the levels in different frequency ranges are on track or if you should probably tweak the mix before publishing it.

There's a potential issue with this parameter that should be fixed.

All good!



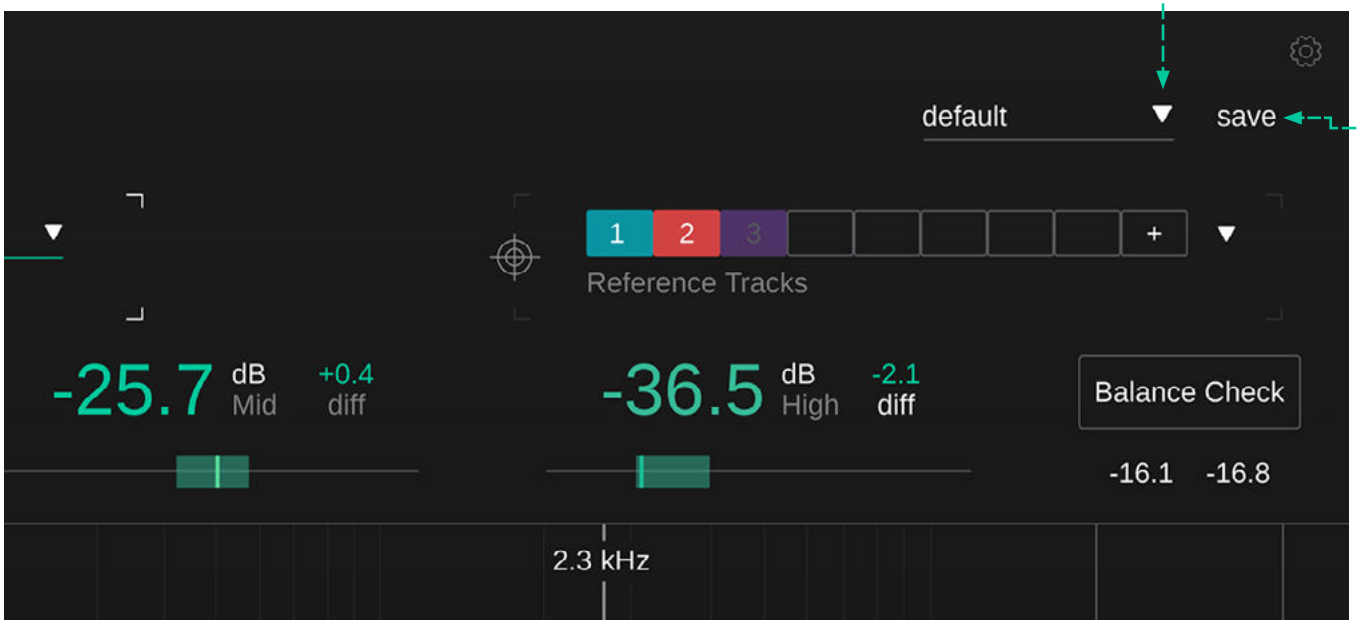
Mono Filter

While mono check is active, the filter caused by mono-summing will be displayed as an additional yellow line inside the spectrum display. A more or less static filter shape indicates that the mono-summing will lead to spectral problems (e.g. comb-filters), while a constantly varying filter shows that summing to mono will not lead to any static filtering effects.

Mono Check

The mono check feature analyzes the width and correlation of your signal. It will point out potential problems with high width values for the low and it will assess the current correlation value in small info boxes.

A preset saves the settings of the plug-in, including all currently loaded reference tracks. This means that a preset can be used to compare multiple different tracks (e.g. of an album) against the same custom references.



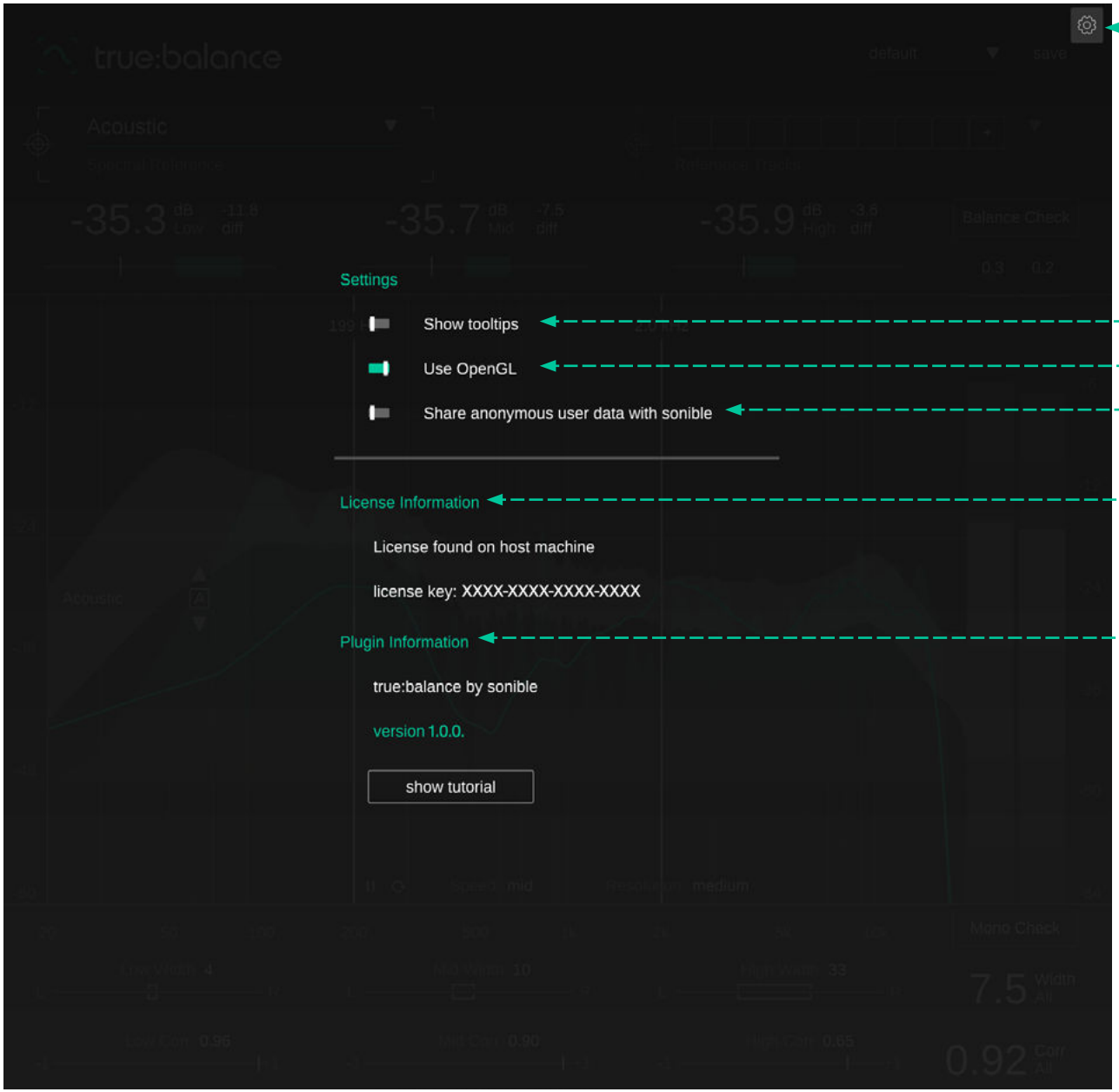
Preset Dropdown
Load a saved preset from the preset dropdown.

Save
Save your preset.

To delete a preset or change its name, go to the preset folder in your local file explorer.

You can easily share your presets among different workstations. All presets are saved with the file extension ".spr" in the following folders:

Preset Folders
OSX: ~/Library/Audio/Presets/sonible/truebalance
Windows: My Documents\Presets\sonible\truebalance



To visit the settings page, click the cogwheel in the upper right corner.

Show Tooltips

Enable/disable tooltips on hover.

Use OpenGL

OpenGL might cause rendering issues on certain computer hardware. Use this option to disable OpenGL.

Share anonymous user data with sonible

Enable to share fully anonymous user data with sonible and help us improve our plug-ins.

License Information

This will display your license state and number (when not licensed via iLok)

Plug-in Information

Here you can find the name and version of your plug-in. Start the welcome tour – a quick overview of the plug-in – features by clicking on “show tutorial”.

Update Notification

When a new version of the plug-in is available, you’ll receive a notification here and it’s also indicated by a little dot on the cogwheel in the main view of true:level. Click on the green text to download the latest version.

www.sonible.com/truebalance

All specifications are subject to change without notice.

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