Metric A | B

Plugin Manual v1.4

Metric AB Manual v1.4

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CREDITS and THANKS

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Thanks to all the beta testers and the amazing team at Plugin Alliance.

THE ULTIMATE MIX REFERENCE AND ANALYSIS PLUGIN

Metric AB enables you to compare your mix to other mixes with a simple click of the A-B button.

It is designed to provide you with an easy, elegant workflow.
From drag and drop file loading (you can even drop multiple reference tracks in one go), instant volume matching, cue and loop functions, to more advanced features including multiple analyses (spectrum, correlation, stereo pan) to industry compliant loudness and dynamics metering.

The trick with using reference files is to be able to instantly hear the contrast and differences between your mix and the kinds of sounds you aspire to. Adding visual feedback from multiple analyses types gives you the visual confirmation of the audio information you are hearing. In environments where listening facilities are less than ideal, it’s even more important to be able to do visual checks to ensure the sound is really there.

Using both audio and visual information provides you with the feedback you need to make better decisions on what to do with your mix to get the best possible results. When you are armed with this level of precision and detail, it empowers you to move forward with confidence, knowing that each creative decision is backed by undeniable evidence.

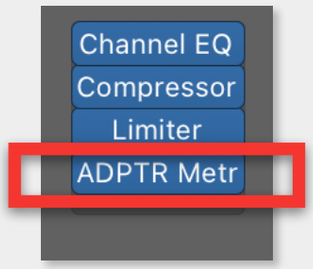
Mix With Confidence

Marc Adamo : ADPTR AUDIO

CONTENTS

Operation

Load Metric AB onto the Master Bus of your DAW. Place it **AFTER** all mastering plugins to loudness match the levels of commercially mastered reference tracks.



Signal Flow

1 The DAW signal is monitored through the A STREAM, and is represented by the BLUE color in the various meters.

2 The REFERENCE tracks are monitored through the B STREAM, and are represented by the ORANGE color in the various meters.

A-B button

3 Toggle the audio stream between A (the DAW) and B (the reference tracks).

The buttons turns blue when the A stream is selected and orange when the B stream is selected.

A Stream Selected
This is your DAW mix

B Stream Selected
Reference Tracks

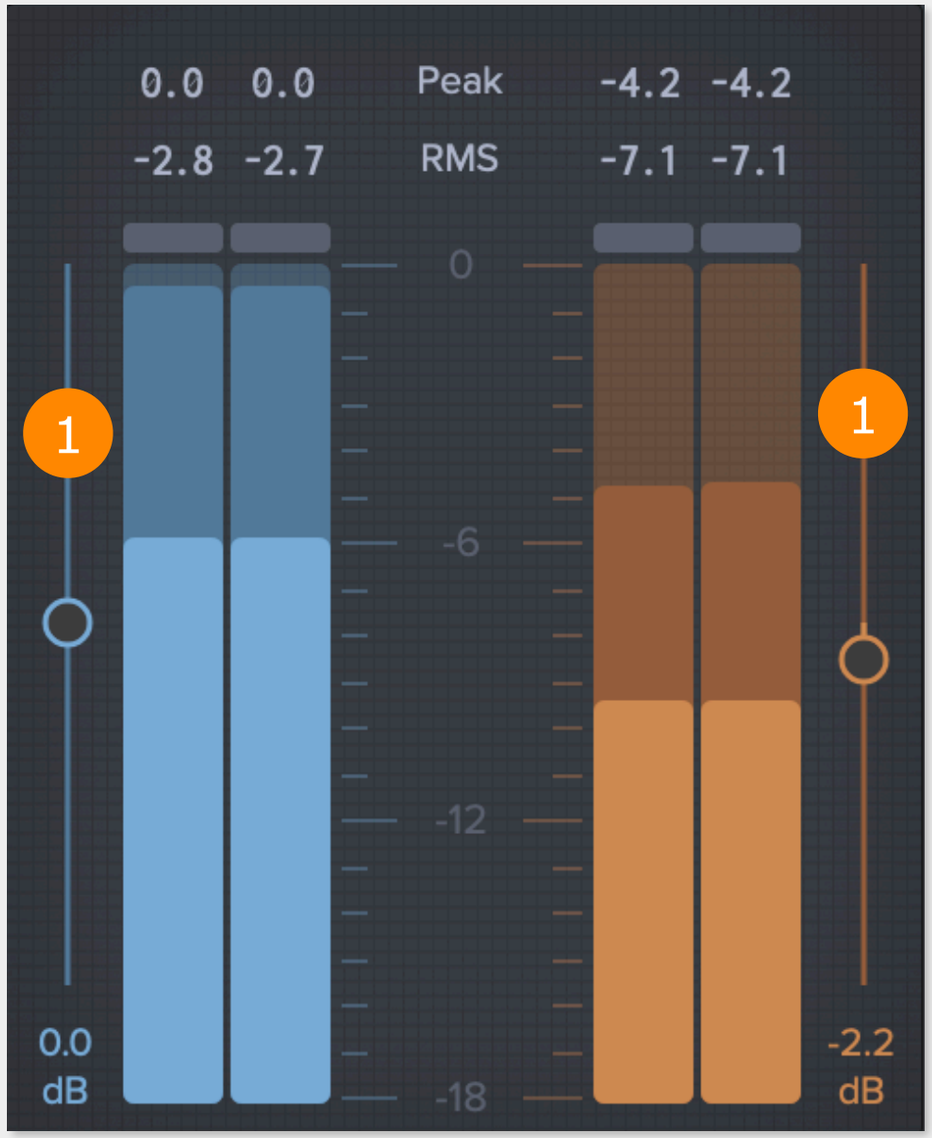
Stream Gain Faders

1 Use the A and B-Stream faders to turn the volume up or down by +/- 18 dBs.

This can be useful when you have already used the loudness match function to change the gain for individual B stream tracks, and you want to calibrate all of them to a new A stream mix.

Another scenario is when you are mastering your mix, and it is getting incrementally louder as you add more compression and limiting, so you only need to adjust the B-fader a little to keep all the B tracks level matched.

All changes to the gain are pre-analysis, so you will see exactly what you hear in the analysis display.



In some DAWS (Logic etc.) you will need to pass audio through Metric AB before you can hear the B stream reference tracks. This can be an inherent condition of using Audio Unit and VST FX, as they like to preserve CPU by switching off plugins when there's no audio at the

PLAYBACK PAGE : WORKFLOW

Loading a Reference Track and Toggling the A-B stream.

1. Click on the Playback Icon to view the Playback page.
2. Drag and drop audio files onto a track slot or onto the wave display area.
3. Select a track by clicking one of the 16 track select buttons.
4. Toggle the A-B button to switch streams

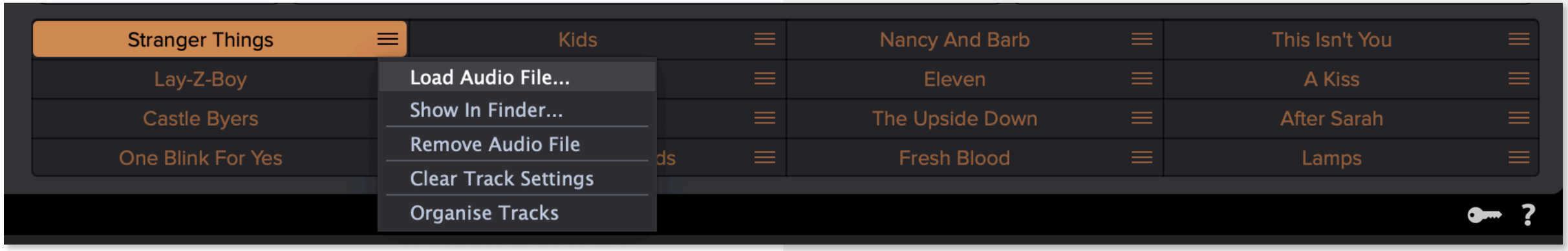
When a B track is selected, the stream automatically switches to the B stream.

You can also toggle the stream back and forth by clicking on the track name. This saves you having to move back to the A-B button.

If you prefer to select a B-track while still listening to the A stream, then use shift-click to select the B track.

Click the **Track Menu** button to show the options.

File Formats: PCM Up to 192k/32bit
MAC : WAV / AIFF / MP3 / FLAC / AAC / M4a
WIN : WAV / AIFF / MP3 / FLAC / M4a



Load Audio - Use this option to load a track from Finder / Explorer.

Show In Finder - Opens finder window at the file location.

Remove Track – Use this to remove any unwanted tracks.

Clear Track Settings – this resets all track parameters including Cue and loop points, playback mode, volume and loudness matching.

Organise Tracks - Groups tracks together and shuffles empty cells to the end of the list.

You can also drop several tracks at once onto a slot, and the tracks will be loaded into sequential slots.

To Load a folder of tracks, click on the **Preset Menu** and select ‘Import Folder Contents’

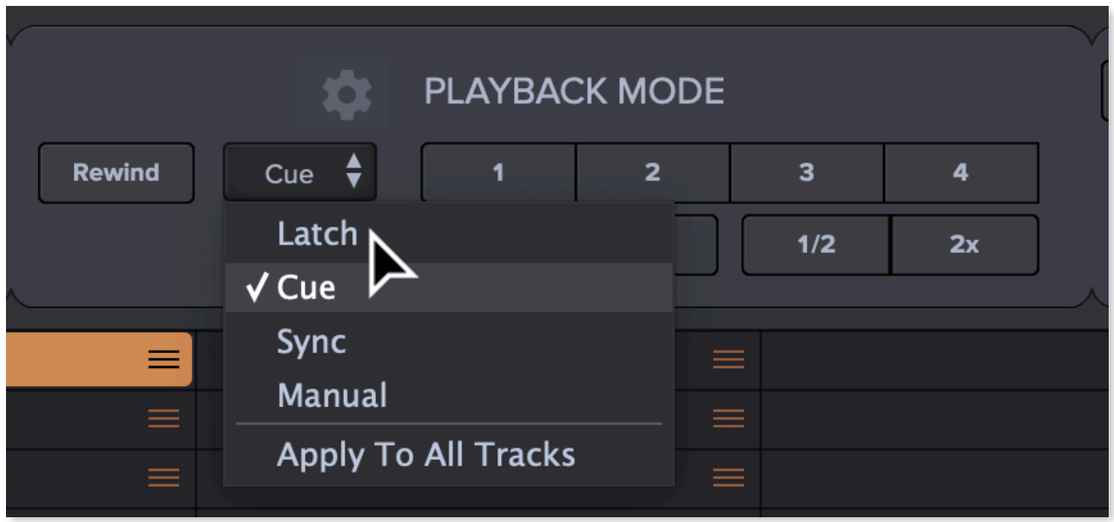
Please note, this will overwrite all the currently loaded tracks.

To manually edit the order of tracks, click on the track name and drag it to a new position. If the destination is already occupied, it will swap places with the new track.

Playback Mode

There are four playback modes to choose from, each has its specific purpose.
Select the option from the menu.

Modes: Latch, Cue, Sync and Manual



1. Latch to DAW transport
This is the default playback mode; it uses the DAW transport to play/pause the reference track.

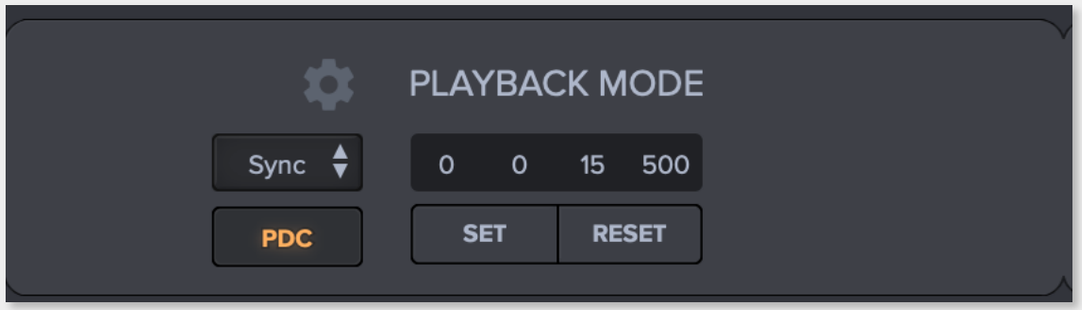
2. Cue aka "Cue Latch"
As per Latch mode, this uses the DAW transport to play/pause the reference track, but it adds an important extra feature that works with the Cue points.
It restarts playback from the selected Cue point when the A-B button is toggled to select the B stream, or when the track button is clicked.

3. SYNC to DAW timeline
As per Latch mode, this uses the DAW transport to play/pause the reference track, but it also sets the playback position of the track from the DAW timeline.

E.g. If you playback the DAW at 2m30secs the B stream will playback at 2m30secs into the track.

IF the DAW is set to loop a specific region, then the B stream will also loop.

Sync Offset
In some cases, you may need to start the track from a later position in the timeline. To do this, put the DAW play-head to the desired position and click the "SET" button.



You will notice the sync time has updated to show the same time.

You can also manually edit the time for
Hours, Minutes, Seconds and Milliseconds.
Hold **SHIFT** while editing the samples amount for bigger increments.
Click the "Reset" button to reset the time to zero i.e. bar 1.

Sync Mode

PDC - Manual Plugin delay compensation

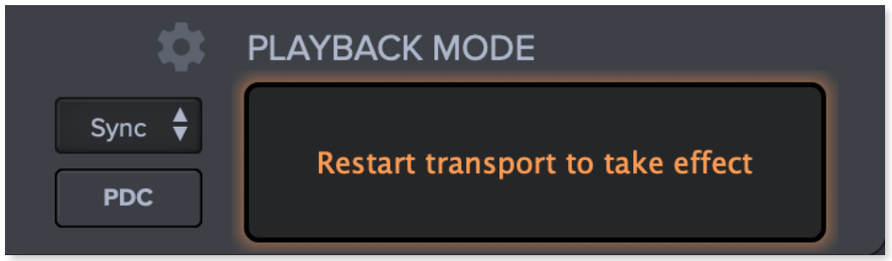
Are the tracks not synchronising correctly even though you've lined them up?
Chances are then, that the DAW is not correctly compensating for plugin latencies.

This can happen with several of the major DAWs for varied reasons, so we created PDC mode to help you manually line up the tracks and achieve perfect sync.

PDC is a global setting, so you will see the same settings for all tracks which are using SYNC mode.

PDC is a global setting, so you will see the same settings for all tracks which are using SYNC mode.

If you don't stop the transport before opening and closing the PDC window, it will ask you to restart the transport to ensure the correct PDC is being measured and used.
Once you restart the transport the message will disappear.



1. Click the PDC button - it opens the Manual Align window. By default, this will activate PDC and you will see the PDC button text turn orange.

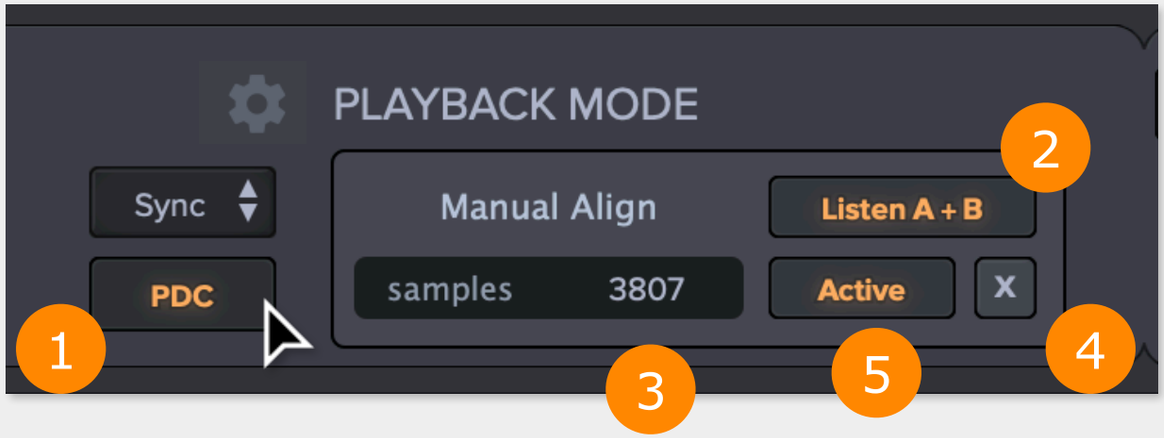
   Start the transport

2. Notice how you can hear both streams simultaneously. This helps us line up the tracks.

3. Drag the 'Samples' value until both streams line up. When they are aligned, it should sound like a very tight, static flanger or comb filter.

4. Stop the transport, close the PDC window by clicking the PDC button (or the X button) and get back to mixing.

5. Toggle the Active button to bypass PDC.

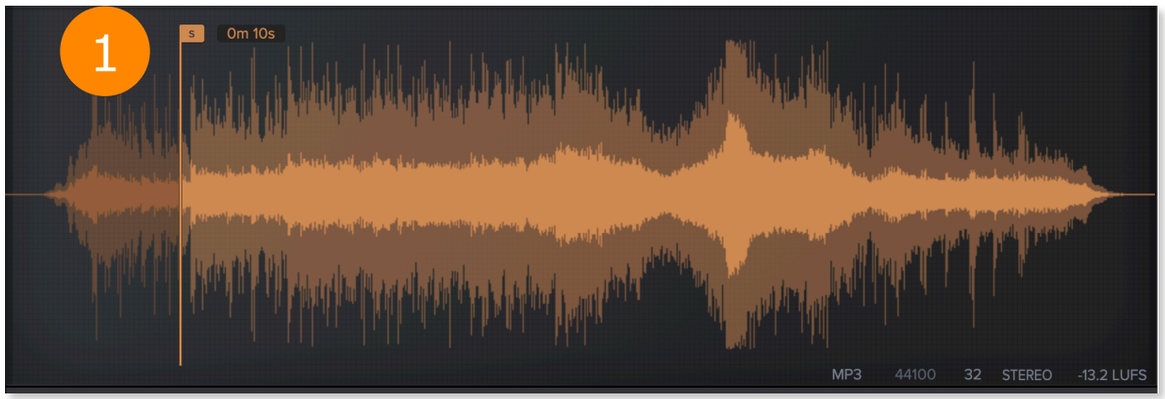


Hold **SHIFT** while editing the samples amount for bigger increments.

Sync Mode

1 Start offset marker

If you want to start the track at a specific position, drag the **Sync Marker** to the desired position. This can be useful if you have changed your arrangement but still want to reference to a previous mix with a different arrangement.

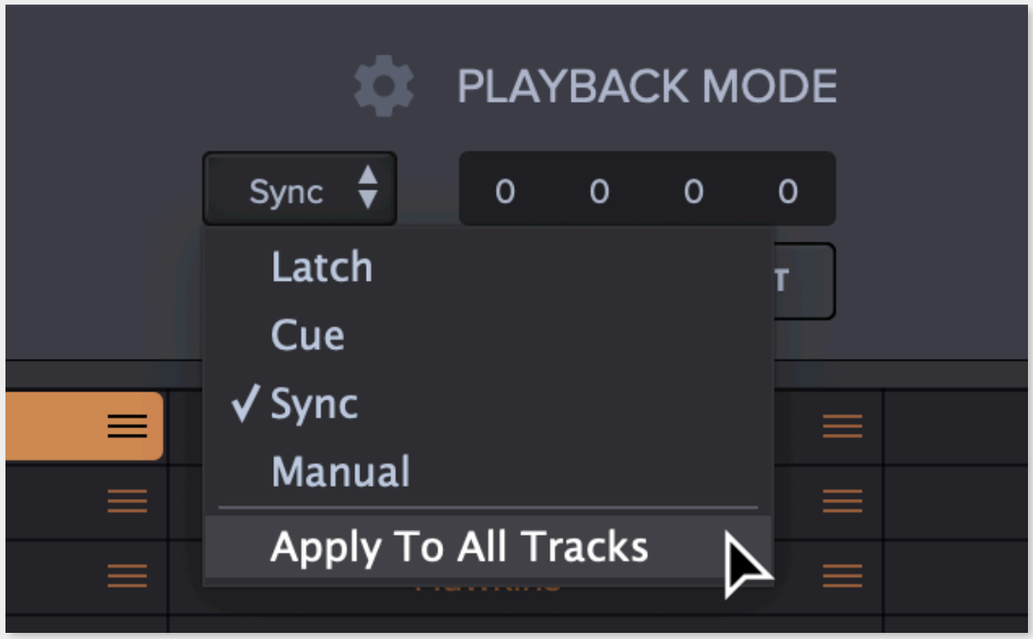


Manual Mode

4. Manual. Use the Play / pause and Rewind buttons to playback the track.

This mode is suited for DAWs, editors and hosts which don’t broadcast song position or transport information to the plugins.

You can apply the current Playback Mode to all tracks by selecting **Apply to All Tracks**.



Use SYNC when you are comparing alternative mixes of the DAW track.
BOUNCE YOUR MIX AT THE START OF THE SESSION
THEN COMPARE BACK AND FORTH AS YOU MIX TO SEE THE CHANGES.

CUE AND LOOP MARKERS

Each track can have up to 4 Cue Markers

1 To set a Cue Marker, click on one of the four **Cue buttons**.

A cue point will be set at the current playback position. You can now click on the button to start playback from that position.

You can also drag and drop cue points onto the waveform.

2 To edit a cue point, just drag it to the desired position.
To delete it, right click on the **Cue button** (or the Cue marker on the waveform) and select **Delete Cue** from the menu.

3 You can also select the cue by clicking on the Cue markers on top in the waveform overview.

CUE AND LOOP MARKERS

Loop

1. To loop an area click on the **Loop** button, this will set the loop marker to the current playback position. Toggle the button to deactivate the loop.

2. To edit the loop, drag the marker to the desired position.
To delete the loop, right-click on the marker and select **Delete Loop marker**.

3. To retain the loop size and move it to a new position, drag the loop while clicking on the horizontal orange loop bar.

4. Move the loop start forward to the current end point, or move the end back to the start.

5. You can quickly resize the loop using the double and half size buttons.

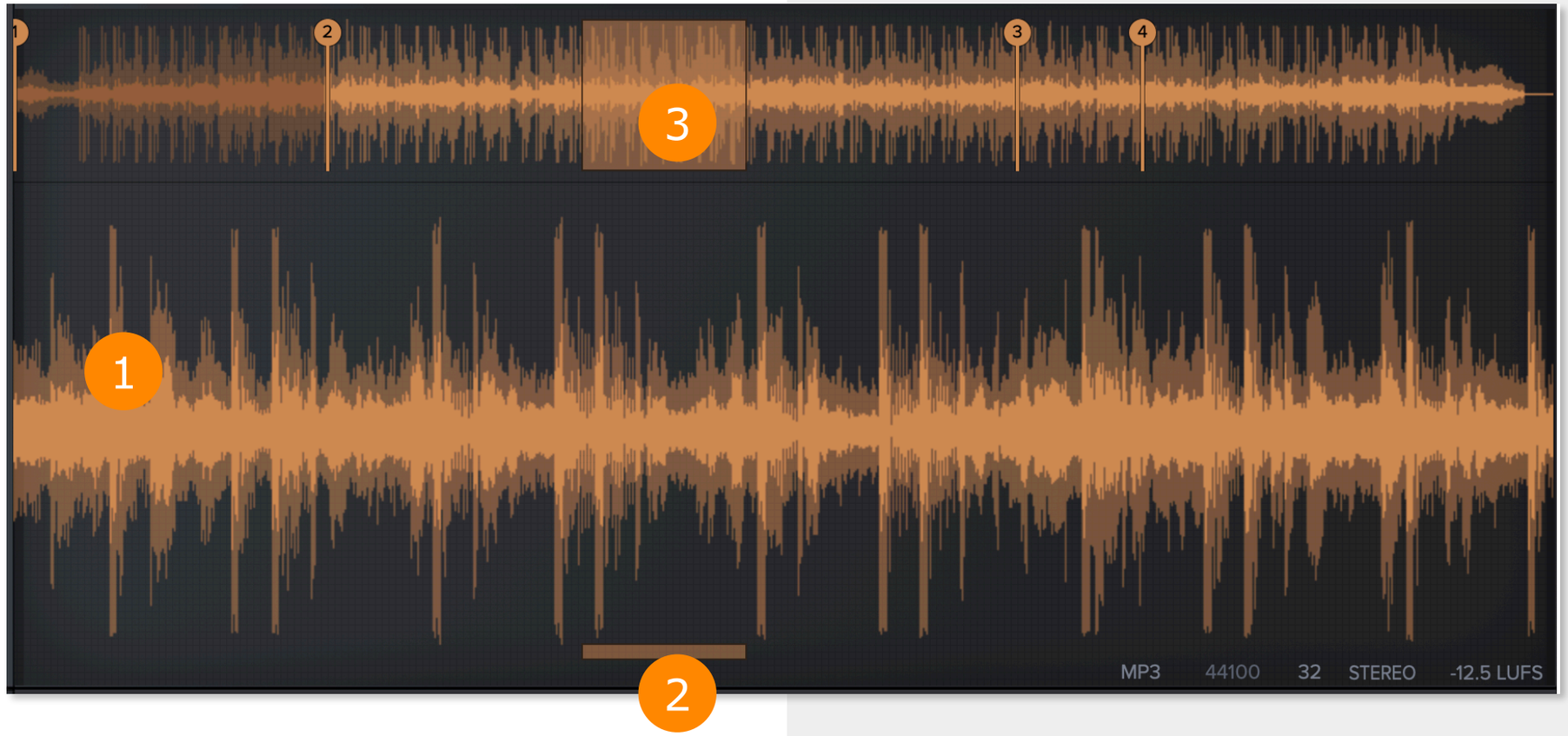
6. Right-Click inside the loop region and select **Reset Loop** to reset to full length.

If you have set a loop to a specific bar length e.g. 4 bars, you can move the loop forwards or backwards by 4 bars by clicking the “Forwards” and “Backwards” arrow buttons.
This is especially useful for quickly moving around a track with precise BPM loops.

CUE AND LOOP MARKERS

Zoom in on the waveform to set Cue and Loop markers accurately

1. Zoom in and out on the waveform with the scroll wheel.
2. You can also move left and right using the scroll bar and the scroll wheel on the mouse.
3. Alternatively, you can drag the highlighted area in the top waveform to reposition the zoom.



Use the Filters to isolate the key frequencies in the mix and focus on the details

1 Toggle the **Filters** button to activate the filters

2 Toggle a **Preset Button** to quickly audition Sub, Bass, Low Mid, Mid and High frequency ranges.

3 **Frequency Range**
You can edit the high and low values of a preset by drag-editing the values

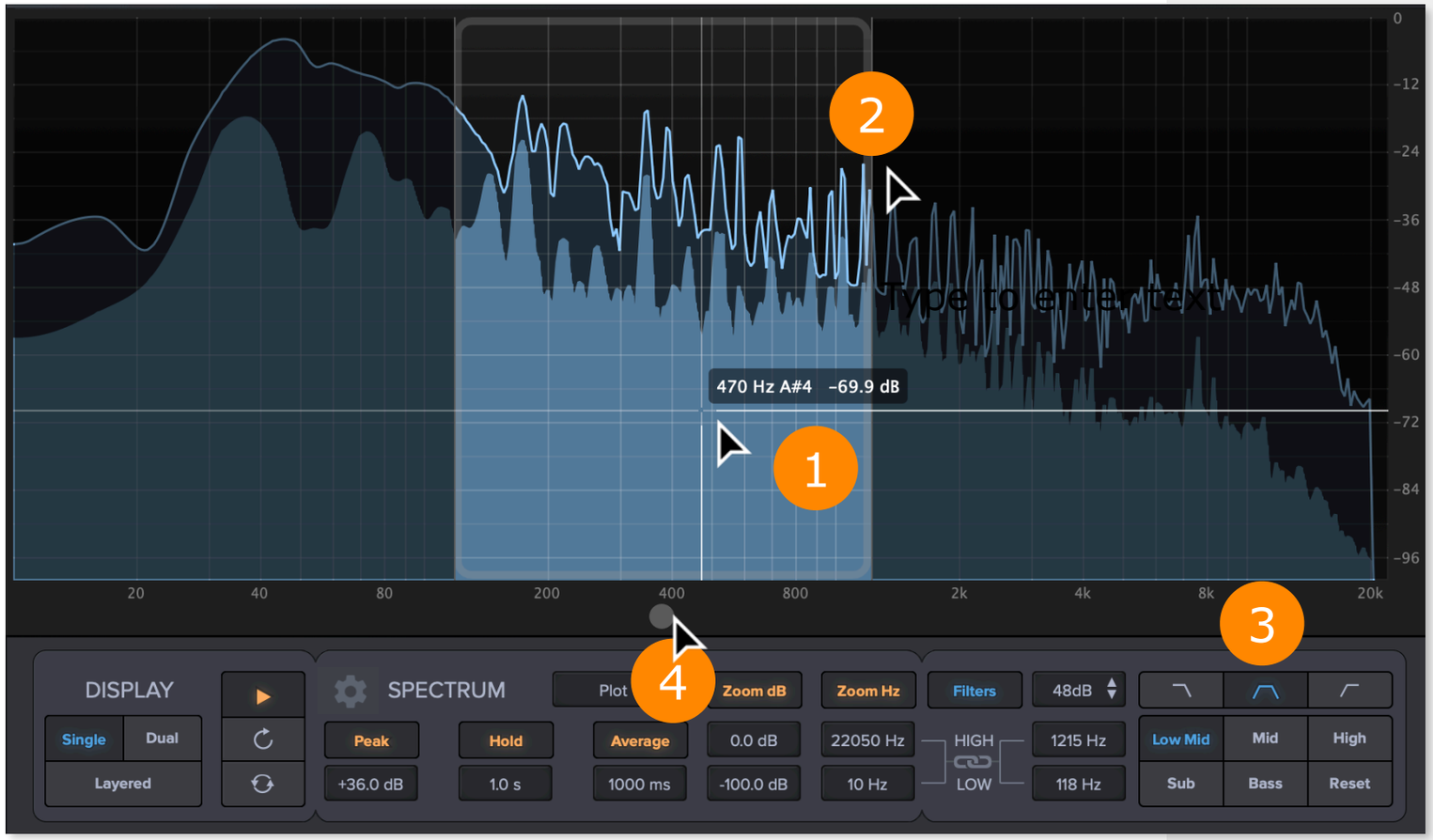
4 **Filter Slope menu**
Choose from 12, 24, 36 or 48 dB

5 Use the **Range Selector** to audition below / inside / above the range.

Edit the Filters directly on the graphs

1 When the mouse hovers over the analysis graph, it now shows a cross-hair with the frequency in Hz and the Midi.

It also shows a 3rd value, relevant to the analysis mode. For spectrum, it also shows the volume in dBs, for correlation it shows the phase, and for stereo image it shows the L-R pan position.



The highlight area represents the selected frequency range, exactly what you are hearing through the filters.

You can edit the high and low frequency values directly on the graph in several ways.

2 Move the mouse to the edge of the selected range, the cross-hair will hide and you can now drag the boundary to the desired frequency.

You can select above or below the current range by clicking anywhere inside the desired range.

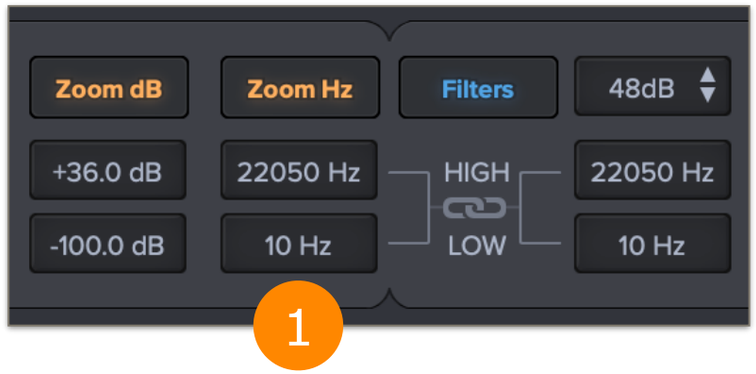
3 you can also use the range selector to select below / inside / above the range.

You can use the scroll wheel to increase or decrease the size of the range.

4 If the range becomes too small to grab, you can position the mouse over the grey circle below the Hz Axis and use the scroll wheel to increase/decrease the range and drag left-right to reposition.

Zoom and Workflow Tips

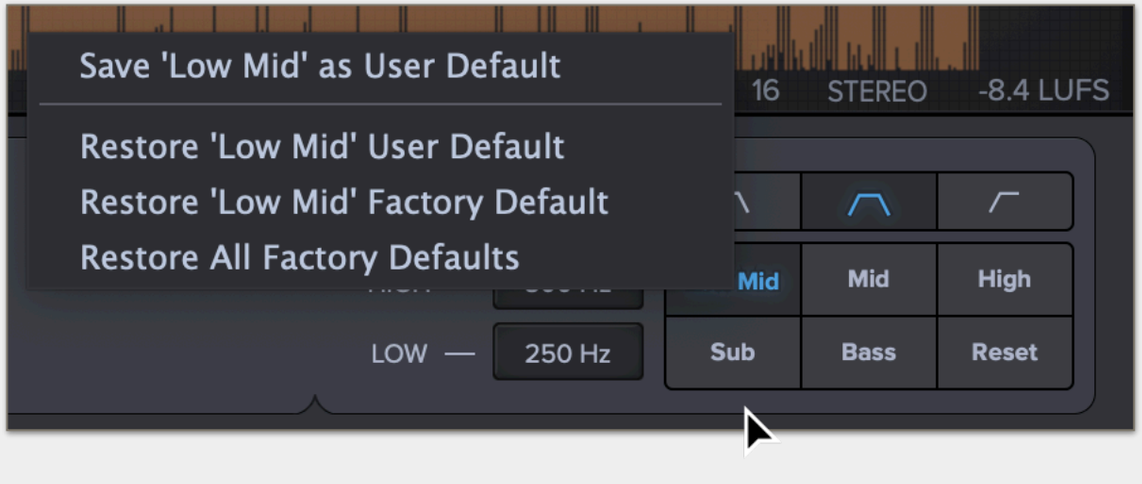
1 **Zoom Hz:** For manual zoom use the high and low number boxes.



2 The zoom can automatically follow the selected range by clicking the **LINK** icon. If you select above or below the range, you will see the zoom update the display to show the new selection.

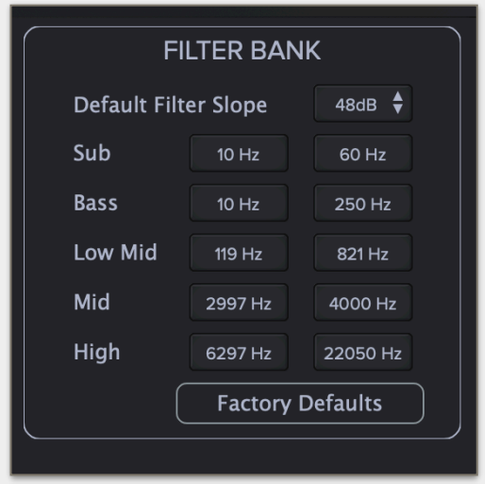
3 **Zoom dB:** Manual zoom using the high and low number boxes. Toggle the Zoom by clicking the button. Max range is +36dB.

If you edit a value for a preset, it will retain these settings automatically.



You can also save the setting as the default by right-clicking and select ‘save as default’.

Other options include
Restore to User Default
Restore to Factory Default
Restore all factory Defaults



You can view and define your user defaults in the settings menu.

OUTPUT METERS

1 The output meter shows the volume as Peak and RMS for both channels.

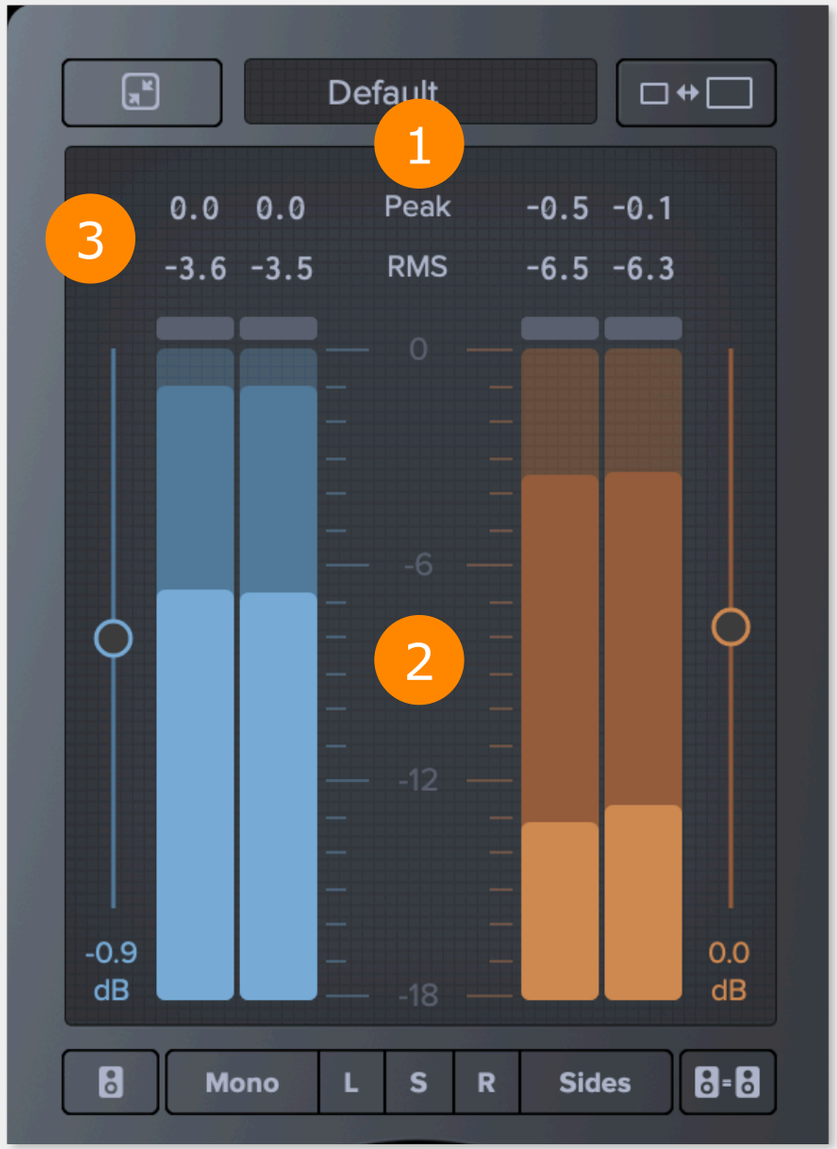
2 You can toggle the scale between the default full-range (-48dB) or zoom into the top section (-18dB).

Just double click anywhere on the meter scale between the blue and orange volume meters.

3 The digital readout shows the highest Peak and highest RMS levels.

Click either one to reset the values for that channel.

Click on the RMS or PEAK label in the centre to reset both channels.



Use the zoomed scale to get a higher resolution / more detailed look when mixing and mastering.

Monitoring Options

Click one of the monitor option buttons to monitor the signal.

Mono = Collapsed from Stereo

L = Left channel only

R = Right Channel only

Sides = Just the "difference" information extracted from the Mid/Side signal.

S = Solo In Place. Use this to Solo either the left of right channels in isolation.
Select S and then click either of the L or R button to hear it in the relative output.

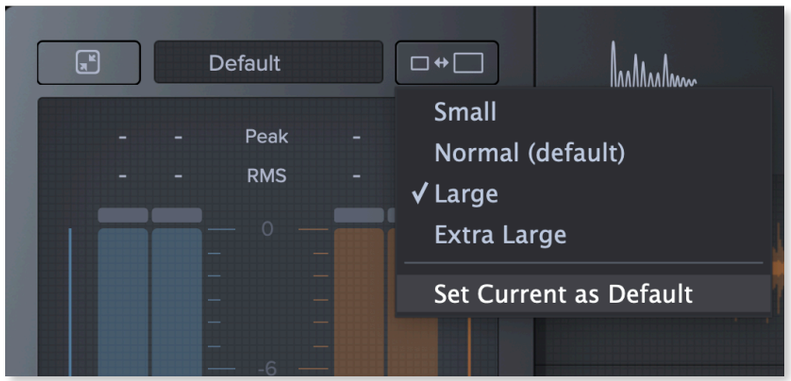
Mono Selected

Left Channel + Solo In Place

It's easier to check the volume levels of all components in the mix in Mono.

Checking the mix in Mono is important for broadcast compatibility.

1 Click on the Resize UI icon.
This opens the UI size menu where you can choose from 4 sizes, Small, Normal, Large and Extra Large.



If you want to make this selection the default size, then click the menu and select 'Set Current as Default'.

2 Toggle the **Compact UI icon** to switch to a smaller interface and back to full size.

3 The track select buttons are now located under the A-B button.

3 Hover the mouse over the button to preview the full name of the track.

4 Select the Cue using buttons 1-4.

5 Use the A and B-Stream faders to turn the volume up or down by +/- 18 dBs.

6 Loudness Match A + B

7 Loudness Match All Tracks

Preset Menu

1 **Click on the preset name to open the preset menu**

New Preset: Creates a new blank preset with defaults.

Open Preset: Open a preset using finder / explorer

Save Preset: Saves the current preset, it will prompt you to name it if you haven't already done so.

Save Preset As: Saves the current preset, it will prompt you to name it.

Presets: This opens a sub menu with all your saved presets.

New Folder: You can create sub-folders to organise your presets.

Reveal in Finder / Explorer: Opens the folder in which the current preset is saved.

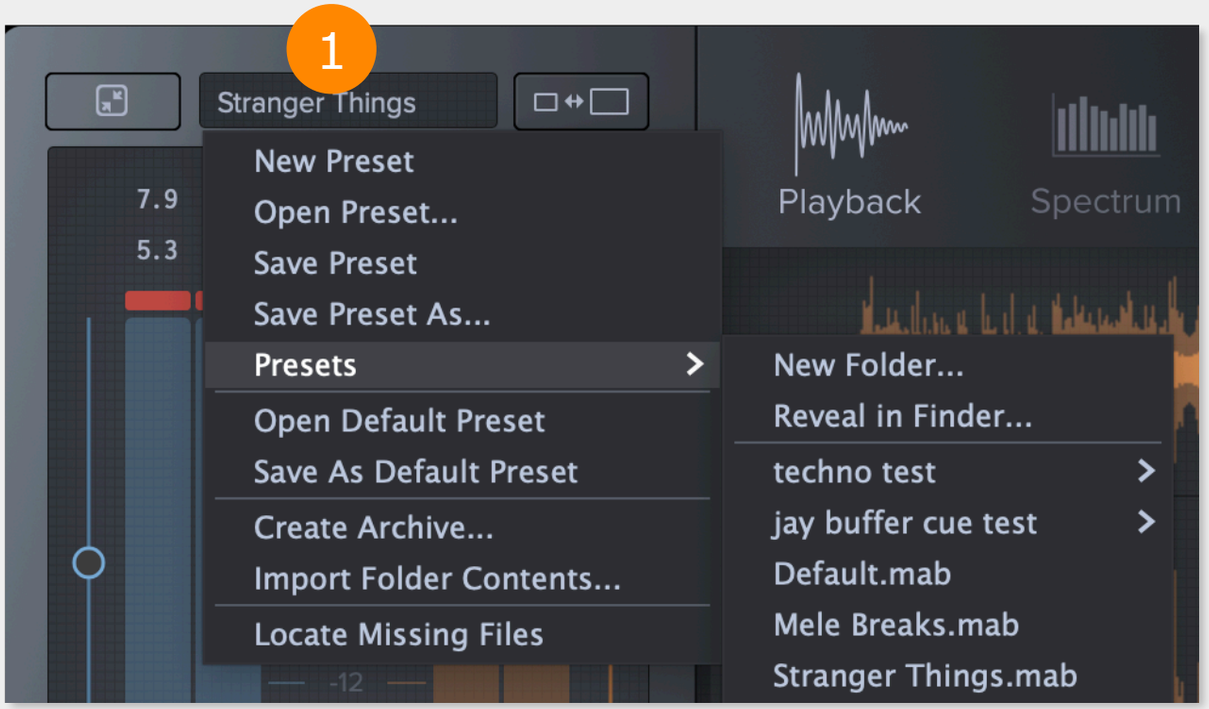
Open Default Preset: Shortcut to open the default preset.

Save As Default Preset: Save the current preset, including ballistics settings and FFT preferences etc.

Create Archive: Save the preset and copy the audio files to a folder. Use this when you need to move the preset to use on another computer or you just want to collect all the audio files together in one place.
It is also ideal if you want to send your reference tracks to another mix engineer.

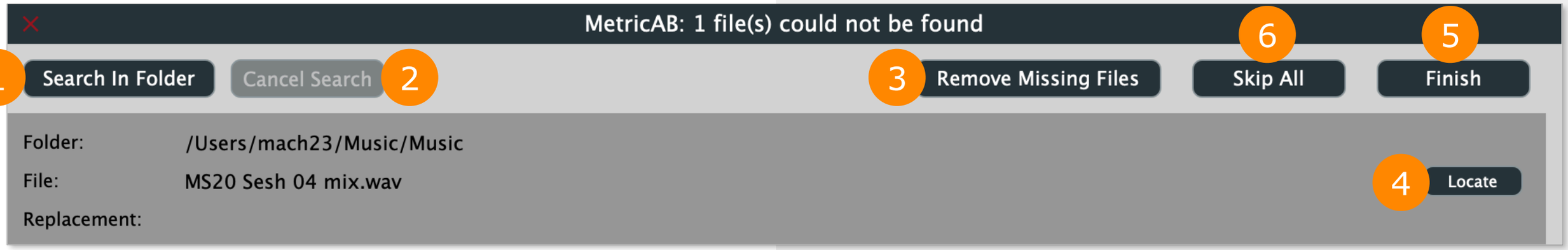
Import Folder Contents: Select this to open a folder of audio files. If there are more than 16 audio files in the folder, Metric will only load the first 16 files.

Locate Missing Files: Launches the missing files helper to help you locate missing files.



MISSING FILES

When a file cannot be found, a missing files dialog window will open.
This can happen when loading a preset or recalling a session.



1 If you know the folder, click **Search in folder** and navigate to the folder.

Metric will search for all missing files, so you can relink multiple missing files this way.

2 A search bar is displayed while Metric is searching;
if you want to cancel the search click the **Cancel Search** button.

3 If the missing files are no longer needed, click **Remove Missing Files**.
This will remove them from the preset / session and Metric will not ask for them anymore.

4 To select the file individually, click **Locate**.
When a file has been located, it will display the replacement path and name.

5 When you have finished, click **Finish.**

6 If you don’t care, click **Skip all** to kick the can down the road.

Metric AB works with the host automation and controller assignment systems.

It does not receive MIDI CC messages, so if you want to use a hardware controller, you will need to link it via the host automation system.

This is primarily designed to provide hands on use via hardware controllers, and to this end the controls are limited to the list over on the right.

Using Logic’s Smart Controls with Metric AB

List of Automation Parameters

- A Stream Fader
- A-B switch
- B Stream Fader
- Filter High Frequency
- Filter Low Frequency
- Filter Mode
- Filter Preset Select
- Filter Slope
- Filter Switch
- Filter Zoom Lock
- Loudness Match (For Selected Track)*
- Loudness Match All
- Meter Zoom (toggle between regular and hi-res)
- Mini-Mode (toggle between compact and full size GUI)
- PDC Switch On/Off
- PDC Value (m/s)
- Select Cue (Cue 1-4) (For Selected Track)*
- Select TAB (playback and various analyses windows)
- Selected Track (1-16)
- Stereo In Place (in conjunction with L or R solo)
- Stereo Mode (Stereo/Mono/ L / R /Sides)
- Track Gain (volume) (For Selected Track) *.
- UI Scale (Small, Normal, Large, Extra Large)

* (For Selected Track) This keeps the focus on the current track, and streamlines the set up process for controllers.

An example setup for Stereo Mode – you can set up four momentary action toggle buttons to represent the four buttons shown on the GUI.

Function High	Value	Function Low	Value
Mono	30%	Stereo	1%
Left	50%	Stereo	1%
Right	80%	Stereo	1%
Sides	100%	Stereo	1%

You can use a similar method for cue and track select, assigning one button per track, but this time, make sure the high and low numbers are identical for each button, so to avoid any toggle action.

Cue Marker select values:

Function	High Value	Low Value
CUE 1	1%	1%
CUE 2	30%	30%
CUE 3	60%	60%
CUE 4	100%	100%

Track select values:

Track Select #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Value %	1	8	15	20	25	35	40	48	54	58	64	70	77	86	92	100

- A Stream Fader
- A-B switch
- B Stream Fader
- Filter High Frequency
- Filter Low Frequency
- Filter Mode
- Filter Preset Select
- Filter Slope
- Filter Switch
- Filter Zoom Lock
- Loudness Match (For Selected Track)*
- Loudness Match All
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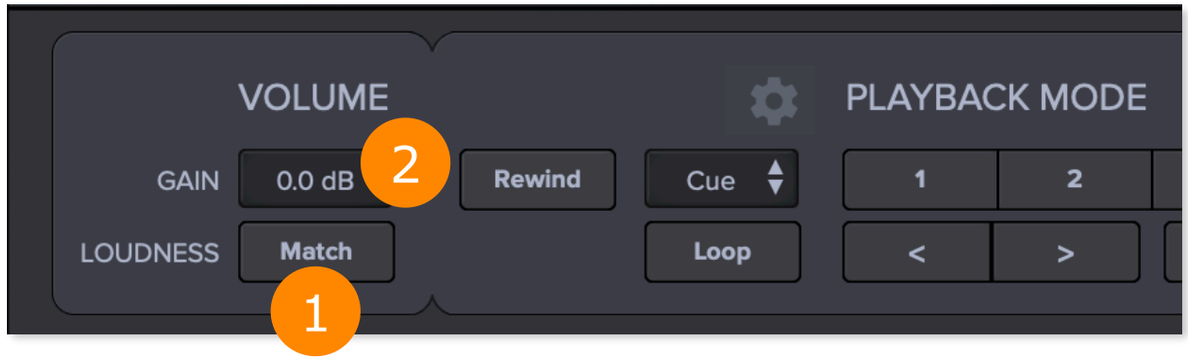
- Mini-Mode (toggle between compact and full size GUI)
- PDC Switch On/Off
- PDC Value (m/s)
- Select Cue (Cue 1-4) (For Selected Track)*
- Select TAB (playback and various analyses windows)
- Selected Track (1-16)
- Stereo In Place (in conjunction with L or R solo)
- Stereo Mode (Stereo/Mono/ L / R /Sides)
- Track Gain (volume) (For Selected Track) *.
- UI Scale (Small, Normal, Large, Extra Large)

VOLUME & LOUDNESS MATCHING

Use the loudness matching function to automatically match the volume of the reference tracks and the A stream.

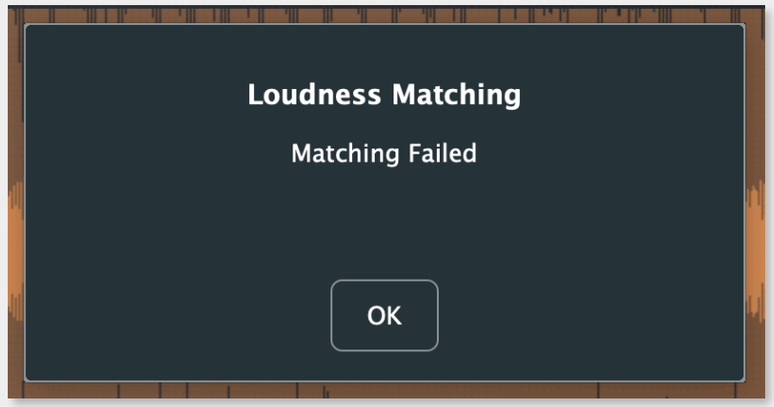
1 Click on the loudness **Match** button, it will now start calculating. It takes approximately 4 seconds to work its magic, at which point the gain of the reference track will be adjusted to match the A stream.



2 You can manually adjust the gain by up to +/-18dBs in 0.1dB increments.

You can reset the gain by double clicking the gain value box.

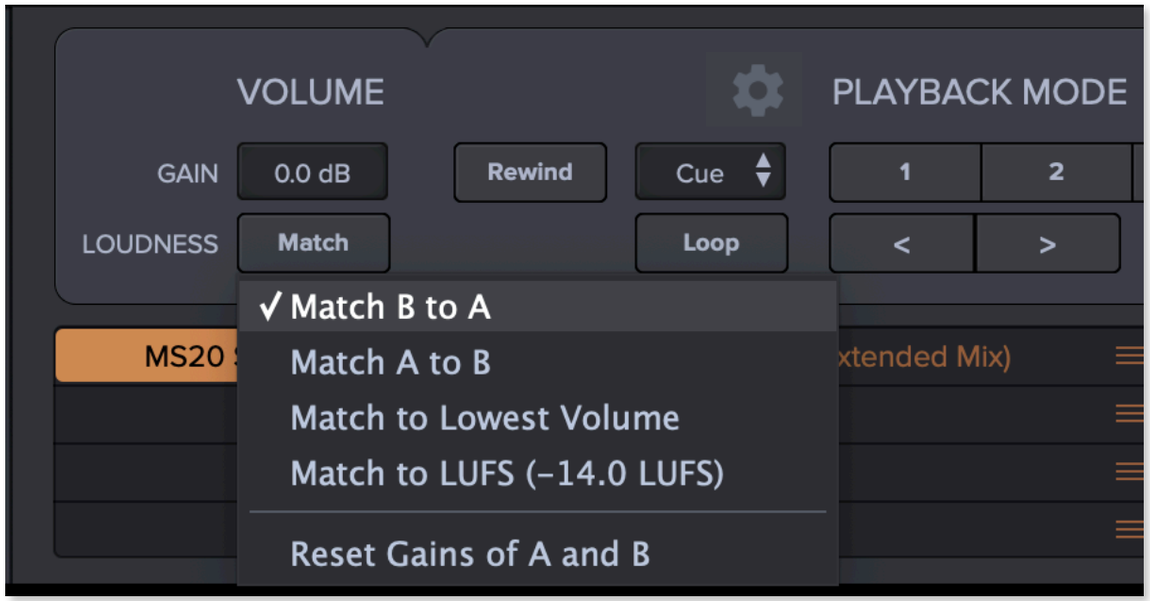
Audio must be playing through both the A and B streams to enable matching.
If no audio is present in either of the A or B streams, it will display the message **Matching Failed**



Loudness Match measures the Integrated LUFS of each stream.
As the volume of your mix changes, you may need to do additional loudness matching.

If the results are close, but not close enough, you can manually adjust the gain of each reference track until you are satisfied.

Loudness Match Modes and Menu



Right-Click (ctrl+click) to show the **Loudness Match** menu.

The default loudness match mode is **Match B to A**.

There are 3 additional **Loudness Match** Modes.

Match A to B: Matches the A stream to the current Reference track.

Match to Lowest Volume: Calculates which stream has the lowest LUFS and matches the louder one to the lowest one.

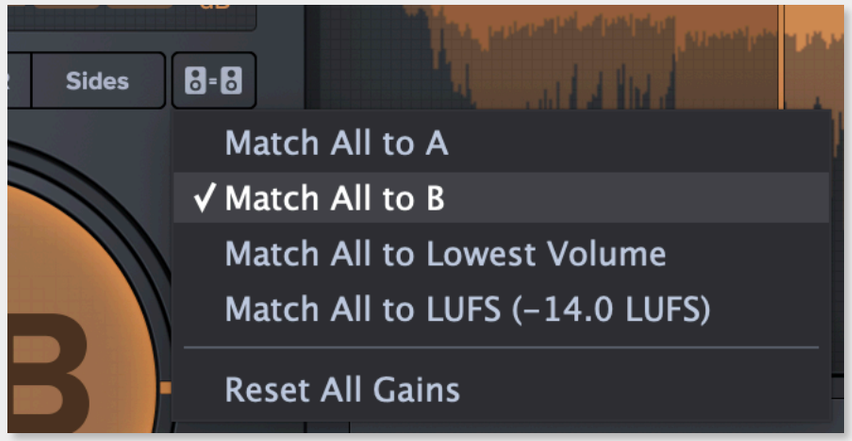
Match to LUFS: Displays current LUFS setting on the **Default Settings** page. You can edit this to any LUFS between -24 LUFS and 0 LUFS.

Match Single Track or Match All

The quick access **Loudness Match** buttons are on the Compact UI, under the Output meter.

1. **Match Single** Reference track (current selection)
2. **Match All** Reference tracks

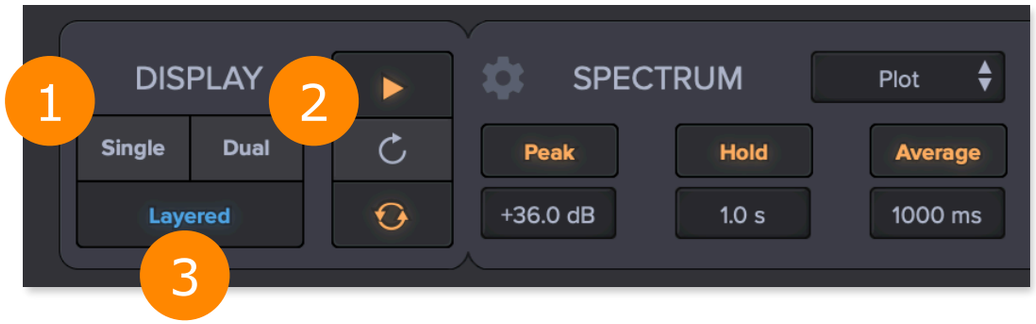
Right-Click (ctrl+click) to show the **Loudness Match** menu. The selected mode is used for both **Match Single** and **Match All** modes.



Common Controls

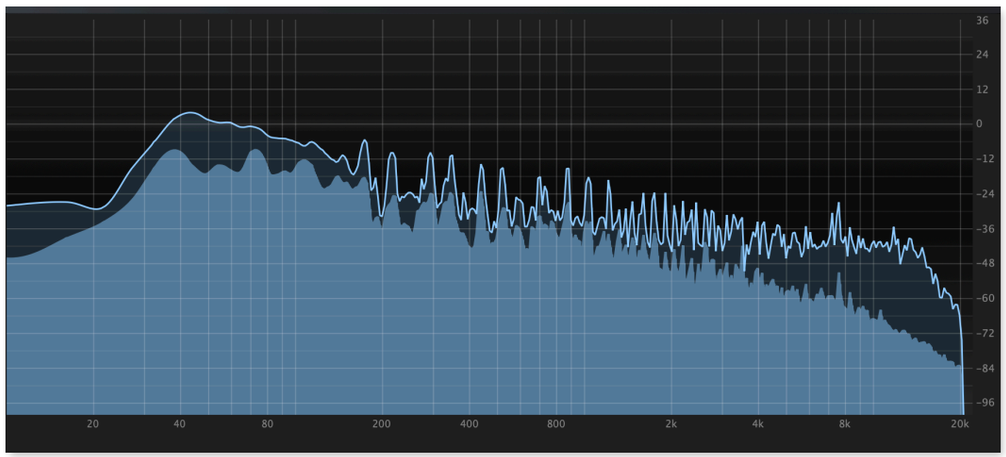
Spectrum | Correlation | Stereo Image | Dynamics | Loudness

Display: Single, Dual or Layered

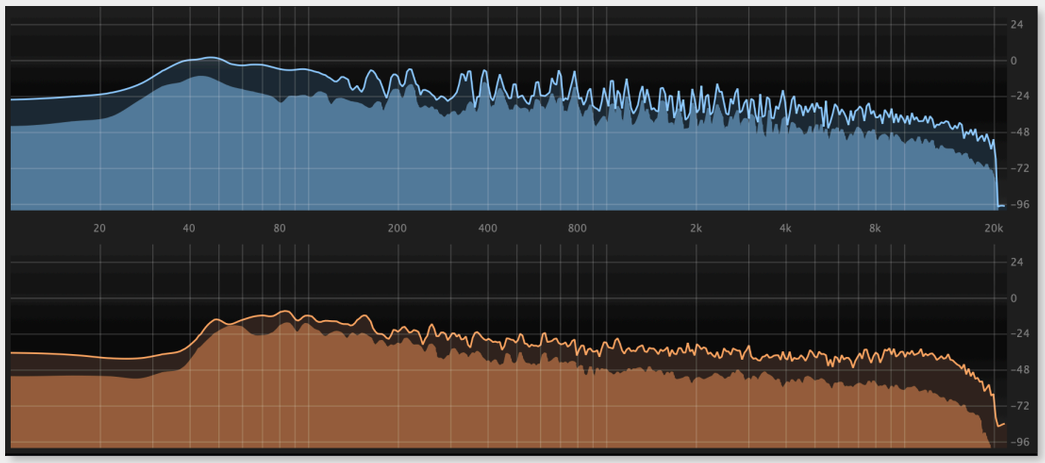


1 **Single** = shows selected stream only

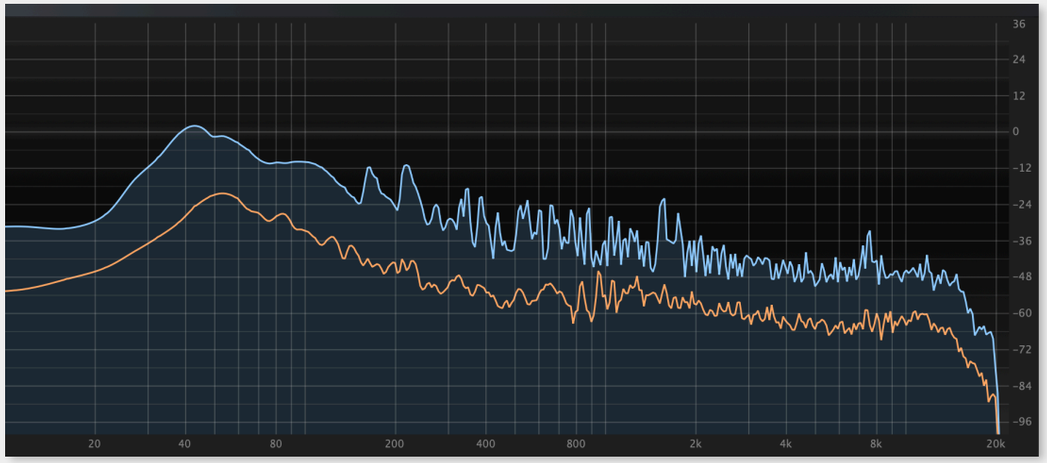
Select the stream using the **A-B button**



2 **Dual** = each audio streams has its own panel.



3 **Layered** = both audio streams in one panel, the selected audio stream is shaded and bold.



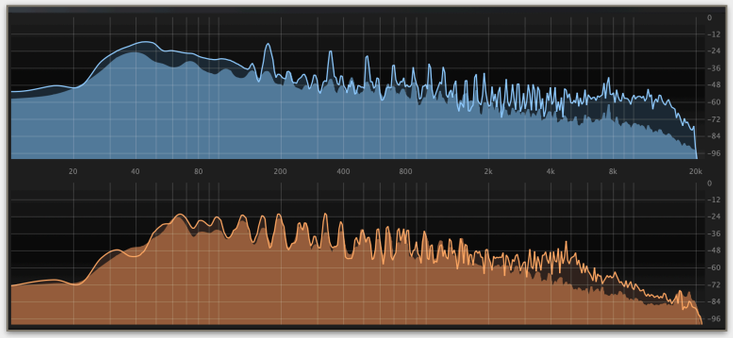
Common Controls

Spectrum | Correlation | Stereo Image | Dynamics | Loudness

Draw Transport

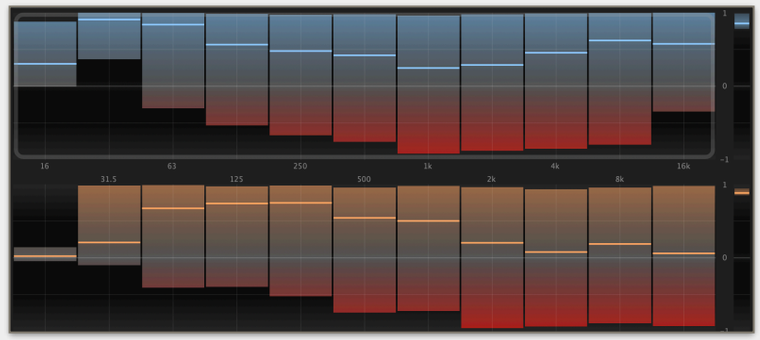
1. **Play/Pause:** Manual play / pause
2. **Reset:** Resets all readings including History graphs and Integrated LUFS.
3. **Latch to DAW** transport: This will pause readings including current Integrated LUFS and will continue when the DAW restarts.

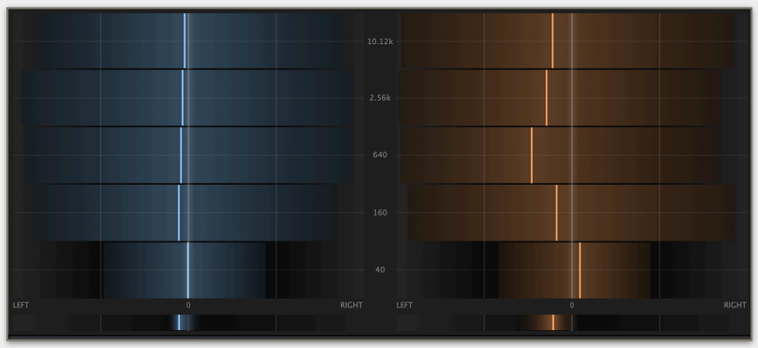
You can set custom graph styles and ballistics for each analyses page.



Plot

Octaves

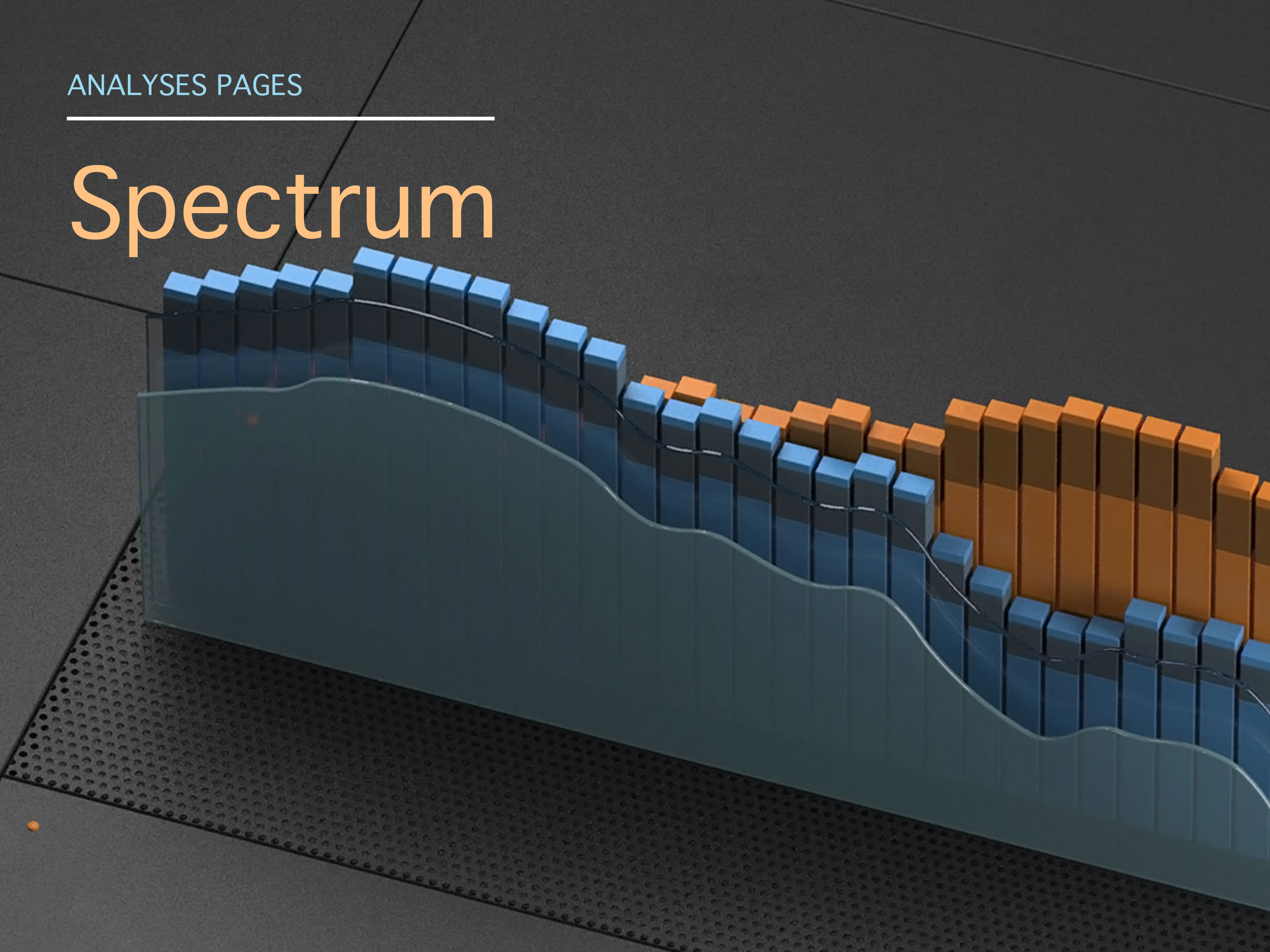




Multi-Band

ANALYSES PAGES

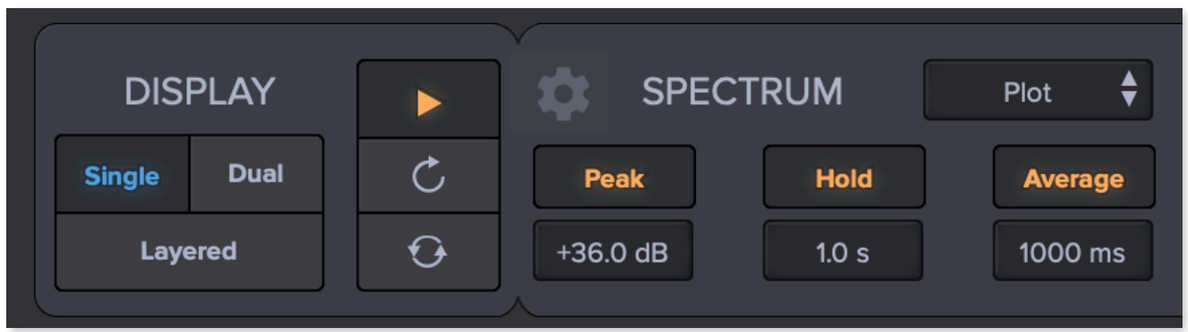
Spectrum



Click on the **Spectrum** icon to view the Spectrum meter.

Toggle the **Peak**, **Hold** and **Average** buttons to enable them in the visualizer.

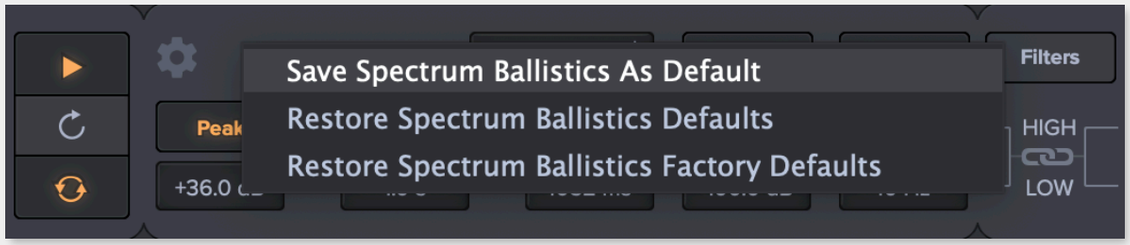
Peak and **Average** show the respective values while the Hold button enables the "Peak Hold" time shown below the button.



Ballistics

You can edit the ballistics of each component by dragging the number boxes below each button.

You can save your favourite Ballistic values as defaults, so they will load automatically each time you open a new instance of Metric AB. To do this, right click on any of the ballistics number boxes, and select "Save as Default" from the menu. It will save all three values for the current analysis mode.

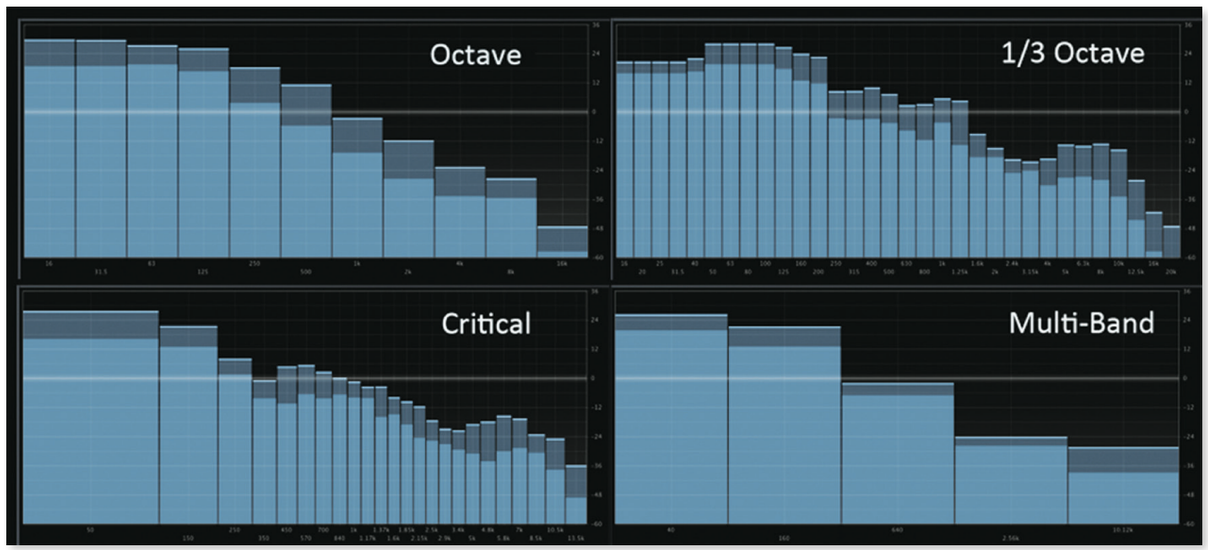


1 Set the Average time to INFINITE to build up a picture of the average frequency content throughout the track.

This can be easier to read than a fast moving graph.

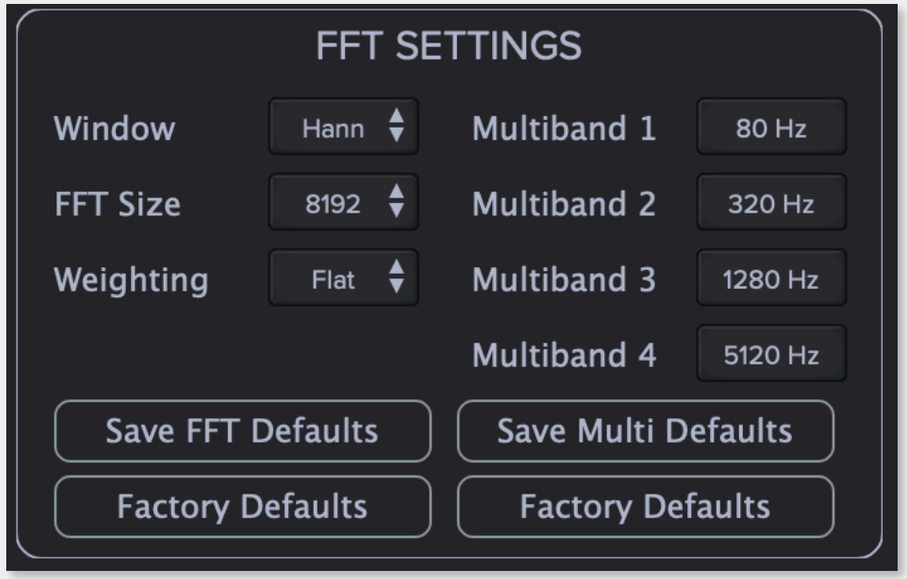
Select the graph type from the menu.

Select **Plot**, **Octave**, **3rd Octave**, **Critical** or **Multi-Band**.

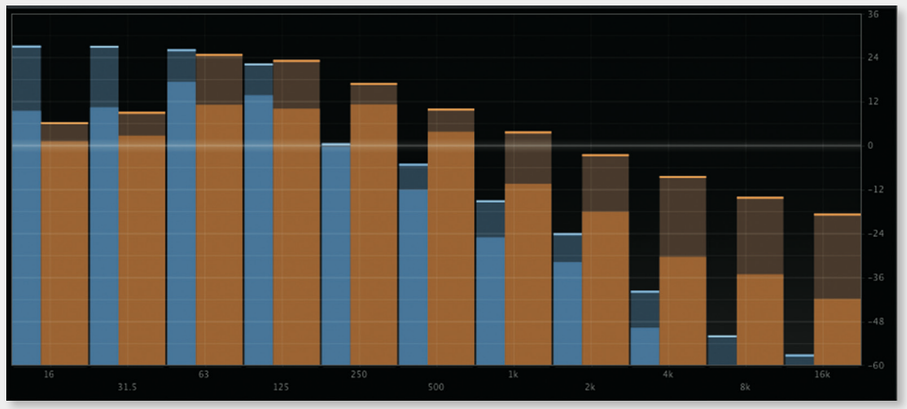


When using the layered display, we recommend comparing just Peak or Average to avoid information overload.

Multi-Band
You can edit the frequency range for each band on the settings page.

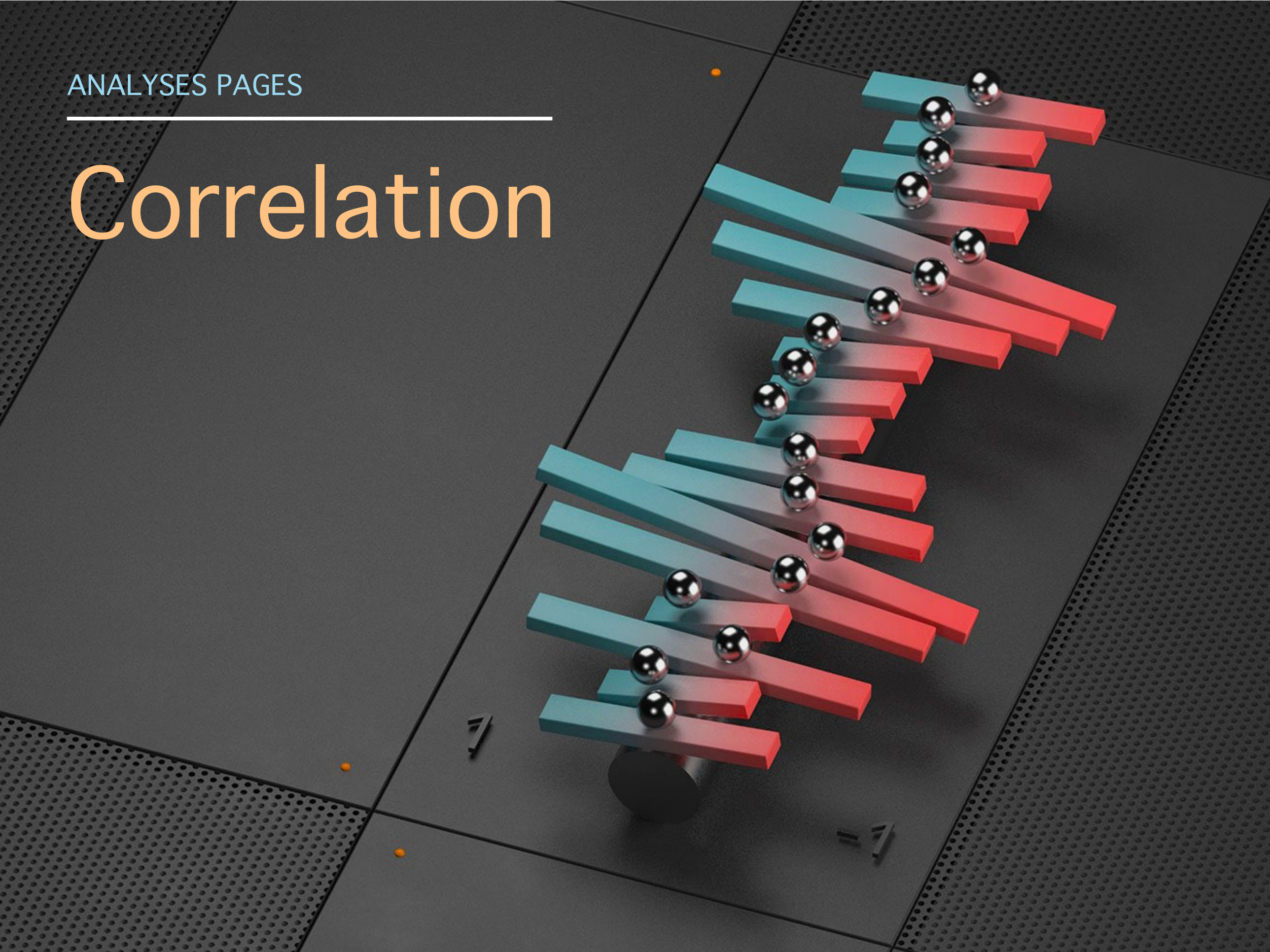


Try using Octaves when you want to compare the bars side by side.

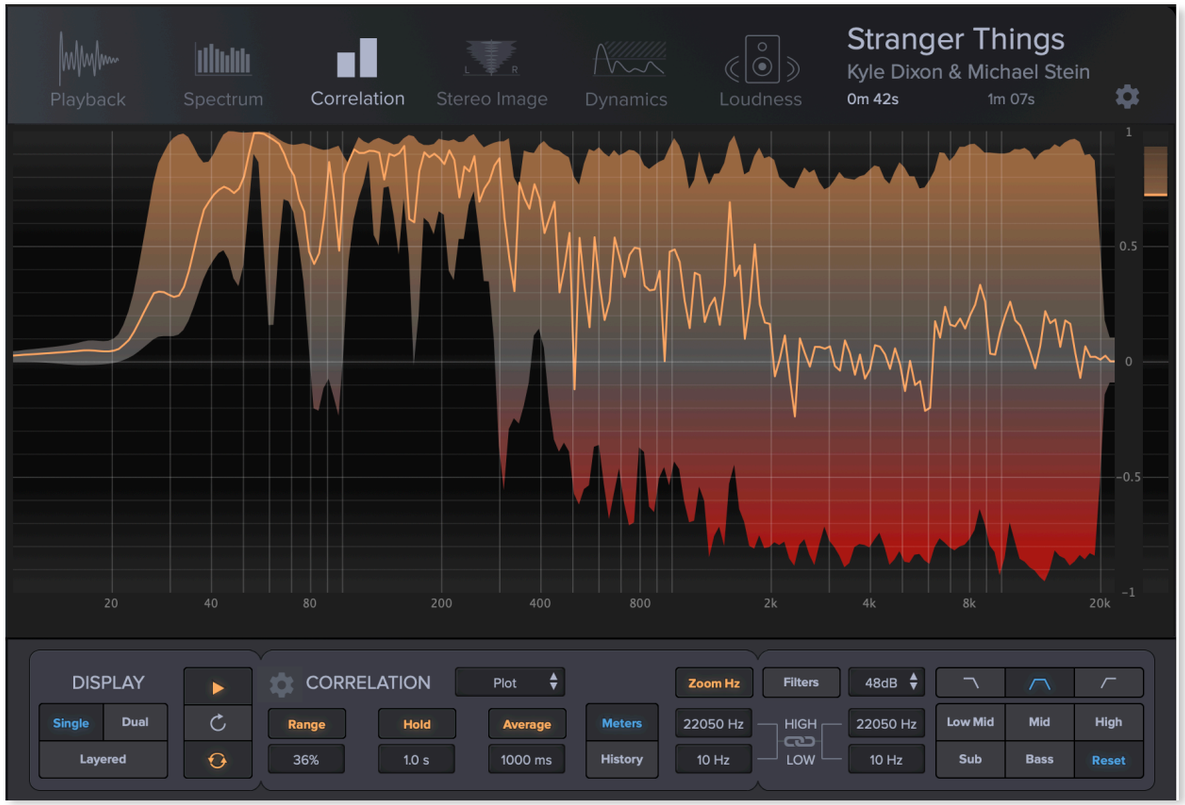


ANALYSES PAGES

Correlation



Click on the **Correlation** icon to view the Correlation meter.



There are two types of correlation meters available, **Meters** and **History.**

Meters

1. Select **Meters** to use the Multi-Band Correlation. This measures the stereo image across different frequency ranges.

It enables us to see which parts of the signal are in or out of phase.

2. Select the graph type from the menu. Choose from Plot, Octave, 3rd Octave, Critical and Multi-Band.

Toggle the

3. **Range**
4. **Hold** and
5. **Average** buttons to enable them in the visualizer.

Range and **Average** show the respective values while the **Hold** button enables the “Range Hold” time shown below the button.

You can edit the ballistics of each component by dragging the number boxes below each button.

Full Band Correlation is displayed on the right side of the screen.

History Graph 1

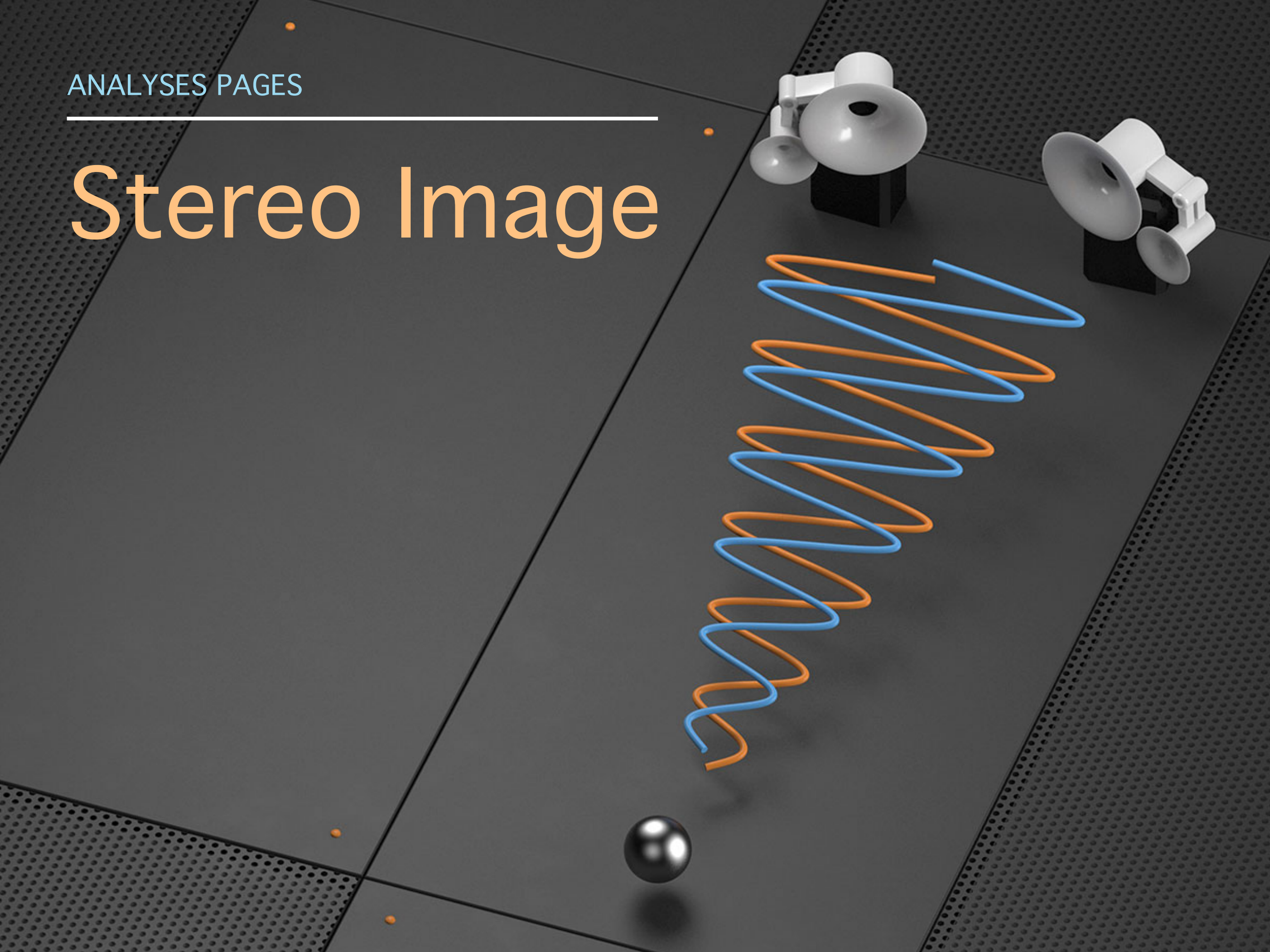
Click the **History** button to use the correlation history graph. This enables us to see the correlation values over a time period. This is useful for getting an overview of a whole track, or catching the odd anomaly that could be missed using a momentary visualizer.

Scroll 2

Click the **Scroll** button to set the window size for the history graph between 10 seconds and 10 minutes. When scroll is off, the window will adapt to fit the elapsed time up to a maximum of 10 minutes.

ANALYSES PAGES

Stereo Image



Stereo Image

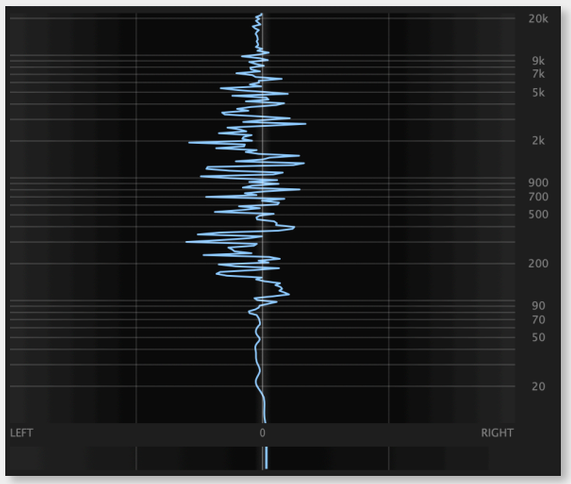
Click on the **Stereo Image** Icon to view the Stereo Image meter.

The Stereo Image page allows us to check the comparative left-right gain of the track over the whole frequency spectrum.
It gives you a visual view of the sonic movement of your track in the horizontal plane.

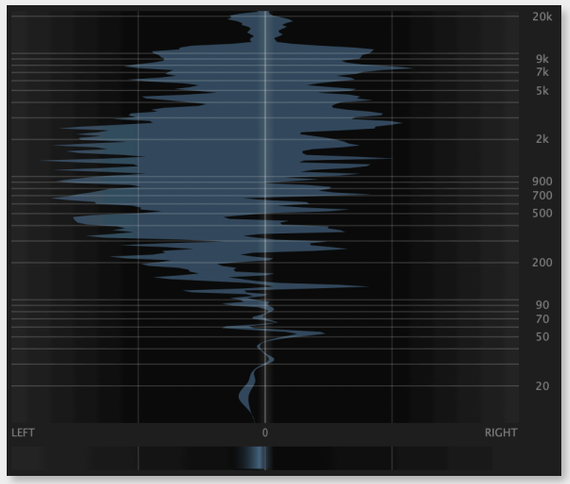
The frequency range is represented by the Y-axis, while the power is on the X-axis (Left – Right).

There are two components displayed on the meter.

Average



Range



Toggle the **Range**, **Hold** and **Average** buttons to enable them in the visualizer.
Range and **Average** show the respective values while the **Hold** button enables the "Range Hold" time shown below the button.
You can edit the ballistics of each component by dragging the number boxes below each button.

Below the graph is a meter displaying the overall image rating.

Stereo Image Example Analysis

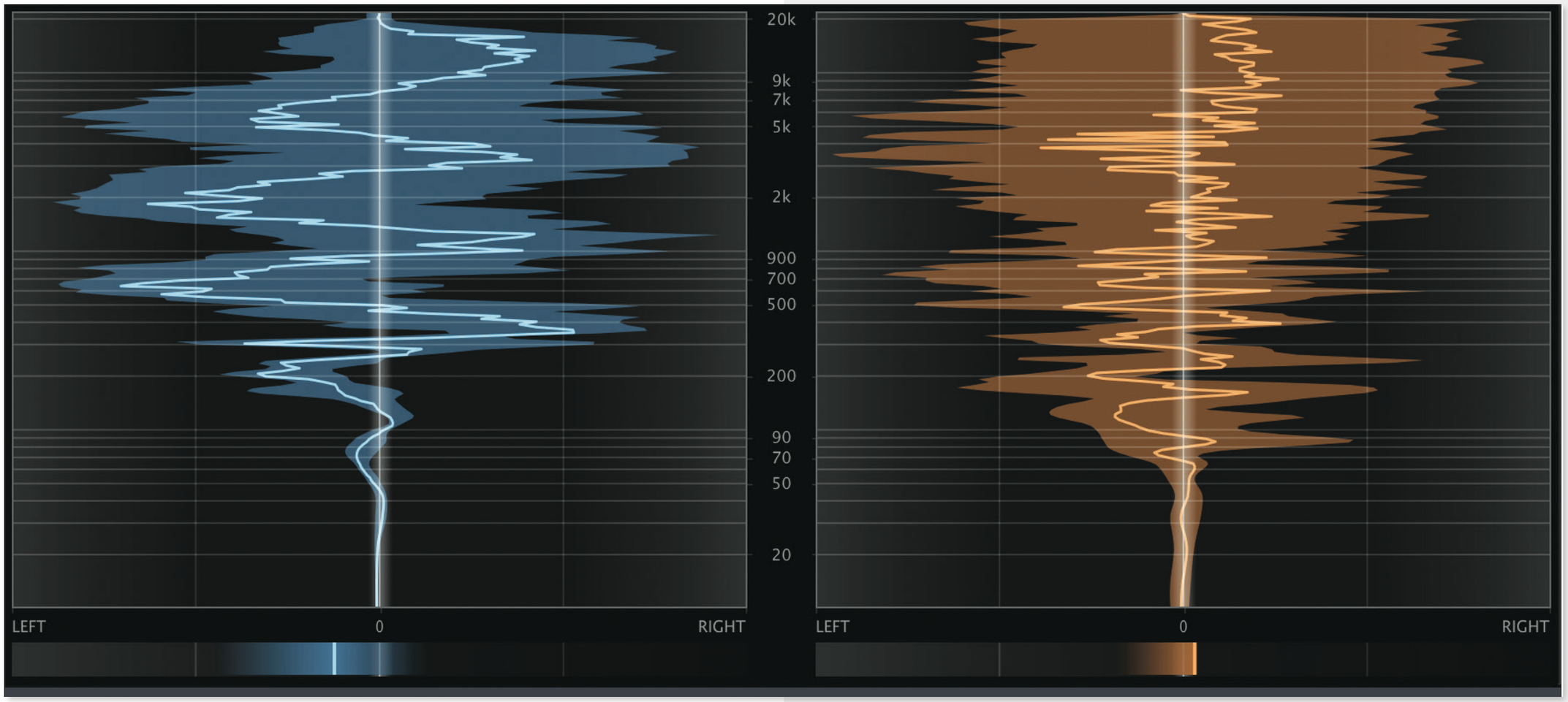
The **A stream** (left side) shows a track processed through Logic's stereo Image plugin.

This produces the wide distribution of energy in alternate frequency bands.

The **B stream** (right side) shows a track that has even stereo pan distribution.

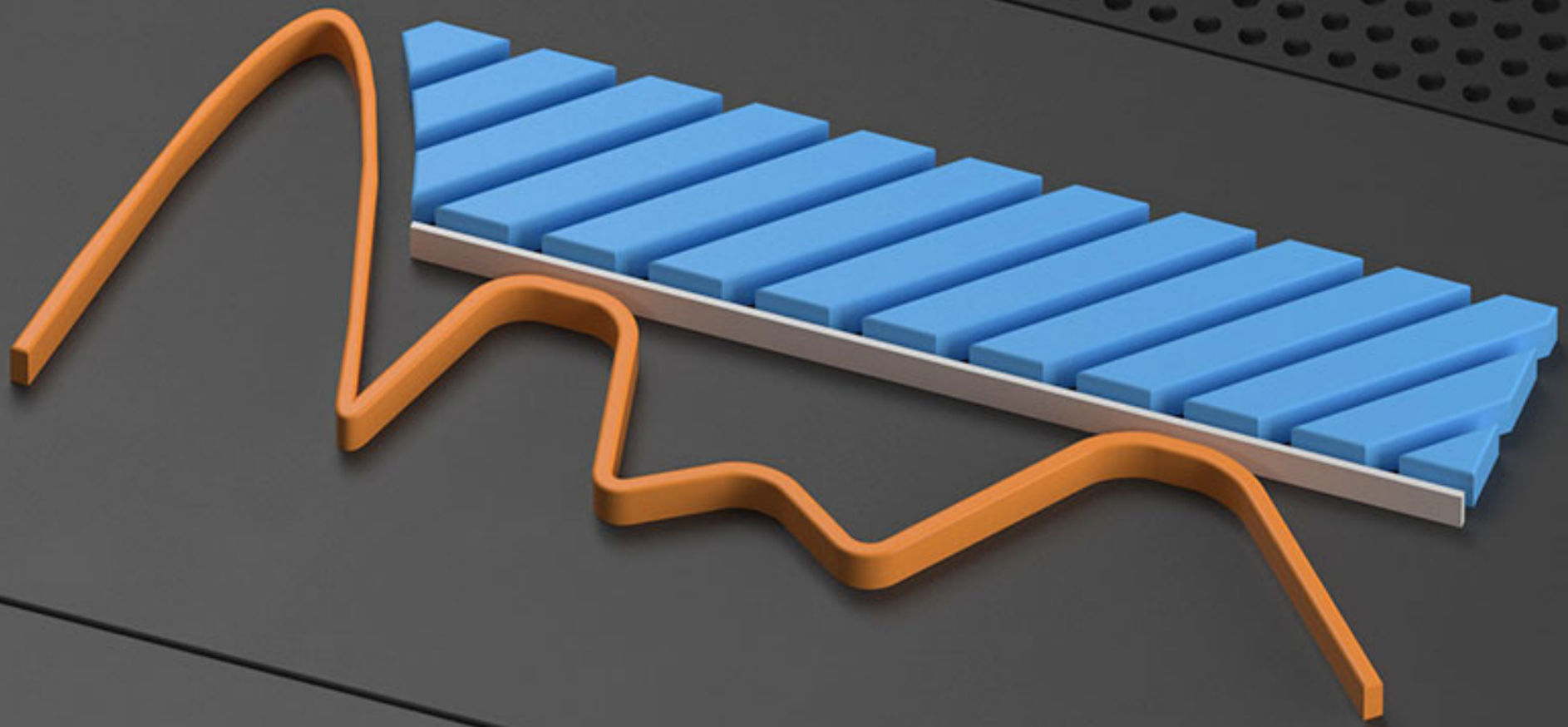
Compare the Average line of each (lighter shade)

The A stream weaves alternatively from left to right, while the B stream is spread much narrower, indicating a more natural, even stereo image distribution across each frequency band.



ANALYSES PAGES

Dynamics



Click on the **Dynamics** icon to view the dynamics

Dynamics are measured using an algorithm called PSR. This process analyses peak volume and short-term loudness data to measure the dynamic range of a signal.

The results are calculated in dBs.

The horizontal Red represents the Target Value.

You can set the manually or select a guide from the preset menu.

Dynamics Display

Top: The current PSR as a large digital number.

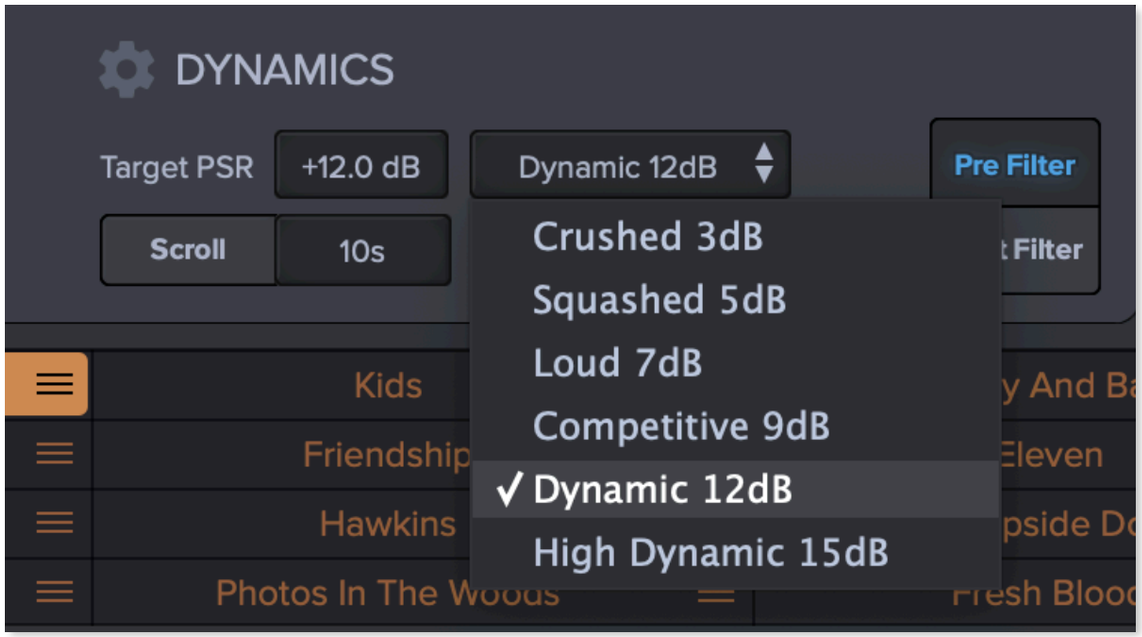
Middle: Description matching the PSR value to help make associations between dynamic qualities and PSR values.

Low: % Above Target: This shows the % of time that the audio is above the dynamic target.

In general: higher PSR values represent higher dynamic range,
lower values represent low dynamic range and compression.

Dynamics Target

Set the target Dynamic value using the number box, or choose a preset from the menu as a guideline. The target value is shown as a red line on the history graph. When the level drops below the line, the meter shows a red fill to indicate that the dynamic range is lower and more compressed than the target.



A target of 12-14 is great for a mix-down.

A target of 7-8 will result in a loud master that still retains dynamics.

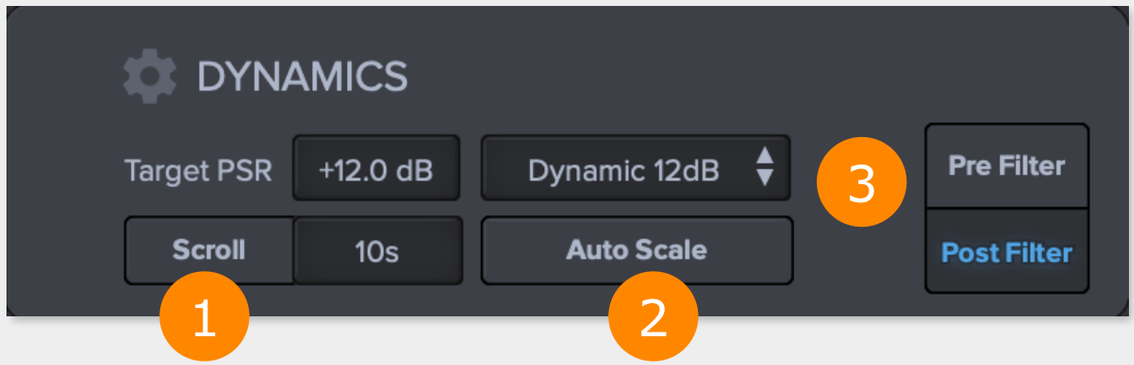
A lot of dance music can be as high as 5-6, but above this tends to sound very squashed.

1 **Scroll:** This allows you to set the window size for the history graph between 10 seconds and 10 minutes.

When scroll is off, the window will adapt to fit the time accrued up to a maximum of 10 minutes.

2 **Auto Scale:** Use this to automatically scale the Y Axis (PSR) to best fit the range of measurements.

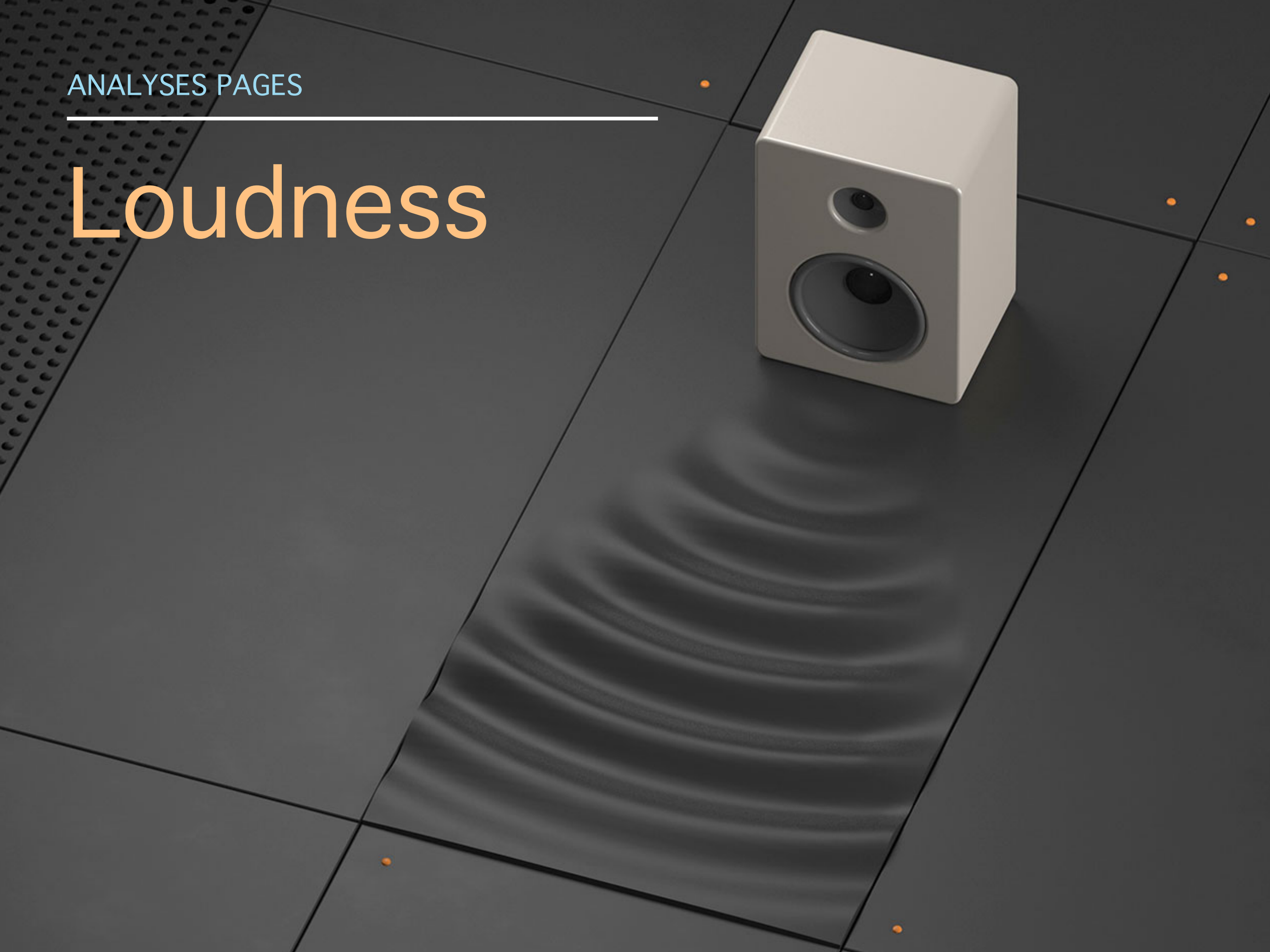
3 **Pre/Post Filter**: You can measure the dynamics of a selected frequency range by activating the Post Filter button. Now you can select the frequency range using the filter unit. Perfect for analyzing bass dynamics and other specialist ranges.



As a general guideline to dynamics, the PSR can vary quite a lot depending on the composition and the elements of a track. A drumbeat is much more dynamic than a sustained pad, so you can expect to see this kind of variation throughout a track.

ANALYSES PAGES

Loudness



Loudness Meters: Use the Loudness meters and history graphs to measure Integrated (I), Short Term (S) and Momentary loudness (M), along with True Peak, RMS and PLR.

On the meters page, you can set a **Target** LUFS, as well as see all the loudness types. Alongside I, S and M, are Loudness Range, PLR (Peak to Loudness ratio) to measure dynamic range as well as True Peak and RMS.

1. Toggle the **Meters/History** button accesses the different meter pages.

2. **Loudness Target:** Use the Target menu to set a loudness target, including EBU R128 and other broadcast standards. When target values are exceeded, the meters will show red to indicate the

The history page allows you to select any combination of I, S and M in the visualizer.

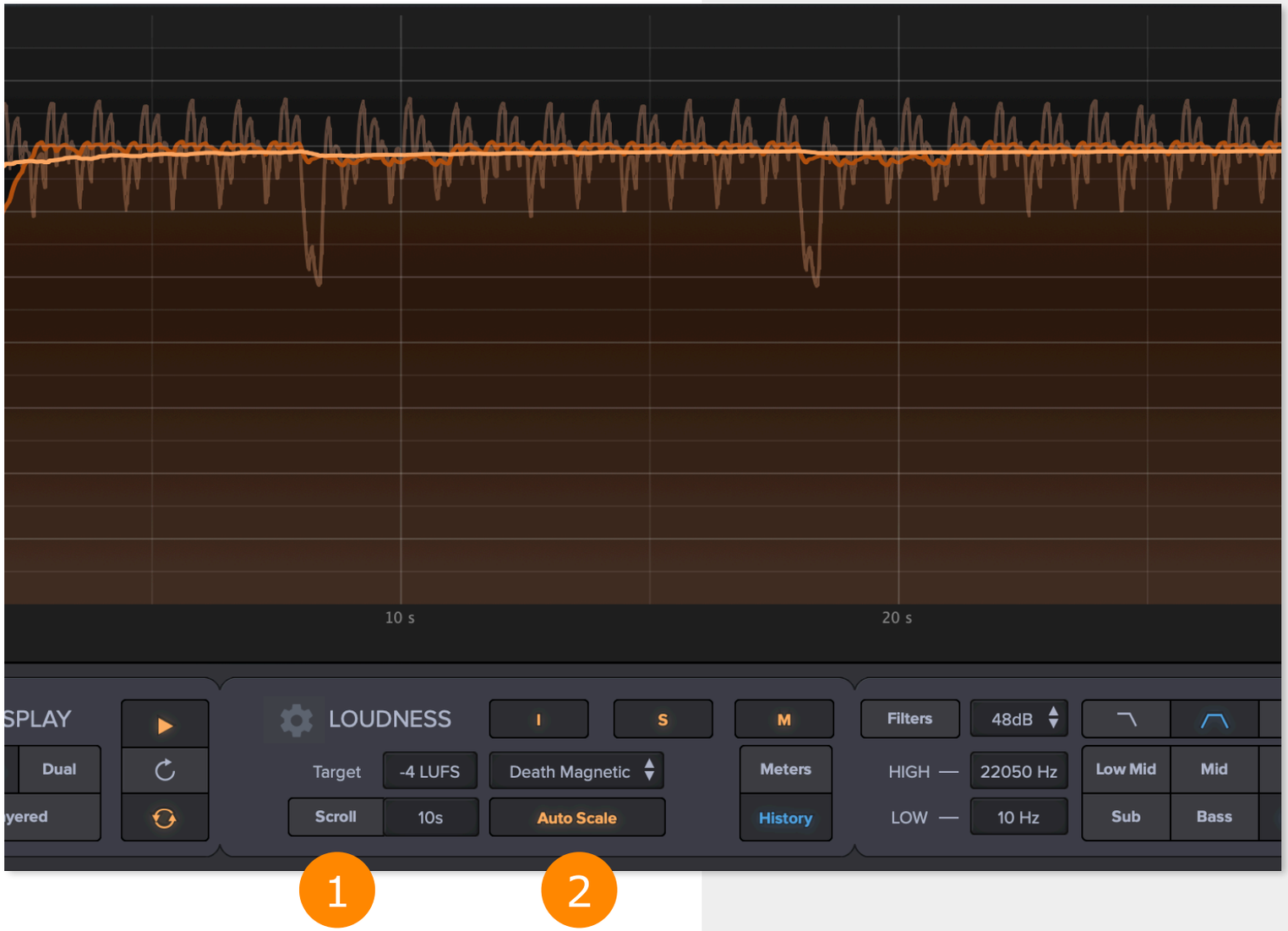
When using layered display, we recommend comparing just one or two selections of I, S or M to avoid information overload.

By default, the history graph displays the entire timeline history in the window.

1 **Scroll**: This allows you to set the window size for the history graph between 10 seconds and 10 minutes.

When scroll is off, the window will adapt to fit the time accrued up to a maximum of 10 minutes.

2 **Auto Scale:** Use this to automatically scale the Y Axis (PSR) to best fit the range of measurements.



1 Click the settings icon to access settings for analyses mode.

2 You can also click the settings button on the tool panel

Default Settings

These settings are saved and become the defaults for when a new instance of the plugin is opened.

1. **Load Default Preset:** If you have created a default preset, then select this to automatically load the default preset when a new instance of the plugin is opened.

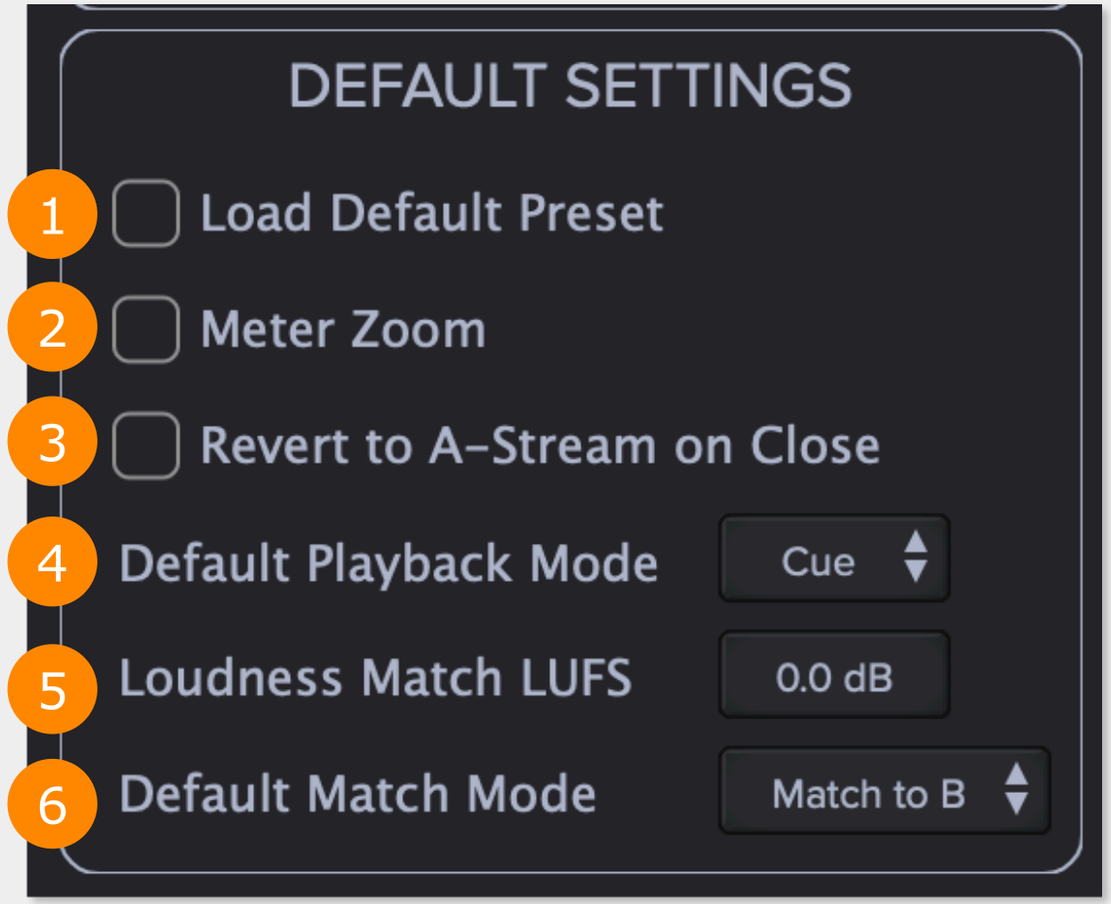
2. **Meter Zoom:** This will make the Output Meter scale to 18dB range instead of the factory default of 48db. You can also click on the meter itself to toggle between 18db and 48db at any time.

3. **Revert to A-Stream on Close:** This will automatically switch to the A-Stream any time you close the plugin window.

4. **Default Playback Mode:** Select the default playback mode for all B tracks between Latch, Cue, Sync and Manual. Now when you load a B track, it will automatically select this mode for you, so if you prefer to use Cue or Sync modes as your default, select it from the menu.

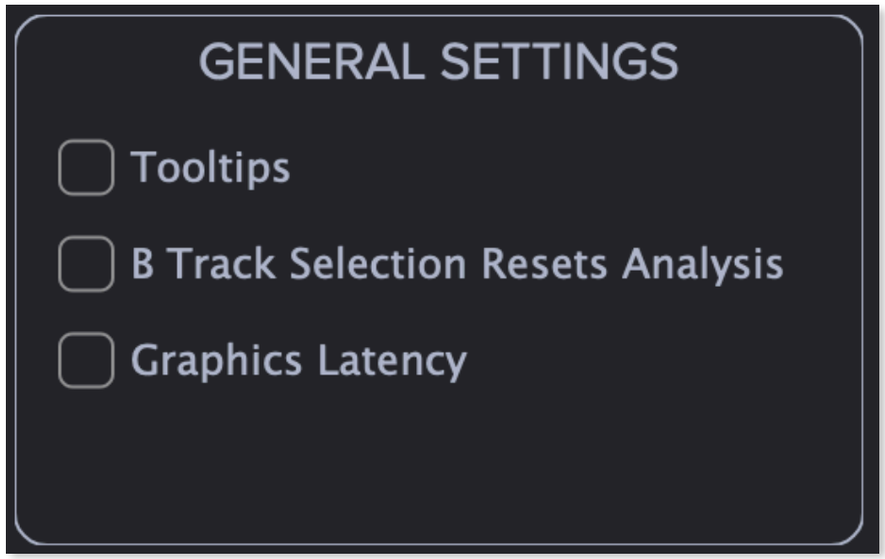
5. **Loudness Match LUFS**: Set the LUFS target for the loudness match LUFS mode. Range = -24 LUFS to 0 LUFS.

6. **Default Match Mode:** Select the default **Loudness Match** mode for each new instance of the plugin.



General Settings

These settings are turned on and off by the user for this instance of the plugin.



1

Tool Tips

Click this box to activate Tool Tips. Hover over a button, display or any area of the plugin to find out what it does and how it works.

2

B Track Selection Resets Analysis

Click this box if you want the analysis window to reset when you select a new B track. This is useful when you only want to see data for the current track and not previous tracks as to avoid any confusion. This works for History graphs, Loudness and Dynamics measurements.

3

Graphics Latency: Click this box to synchronise the audio with the visual display for the spectrum, correlation and stereo image meters.

Under normal circumstances, the visuals lag a few milliseconds behind the audio. This is natural because the meters have to analyse the sound *before* they can display the results.

When the visual results are totally in sync with the audio, you will see what you hear, and hear what you see. The difference in perception is sublime, transients and decaying sounds are instantly recognisable as everything becomes sharper. Now your mind is able to make better associations between the audio and visual images.

Because this introduces a lag in the audio, it's not ideal for situations where you are using a MIDI keyboard to record performances.

4

Open GL active (windows only)

Activates Open GL graphics rendering on Windows OS.

If you are experiencing slower frame rates, try activating or deactivating this to get better performance

1 Ballistics Defaults

Set the default values for all three FFT meters (Spectrum, Correlation and Stereo Pan.
Click **Factory Defaults** to restore the factory default values.

You can also set the defaults on the analysis panel by right-click on any of the ballistics values and selecting **Save Ballistics as Default** from the menu.

2 FFT settings

Selects the *Current* settings for the FFT window and the Multi-band mode.

You can save the current settings as the defaults by clicking **Save FFT defaults** or **Save Multi-Band Defaults**.

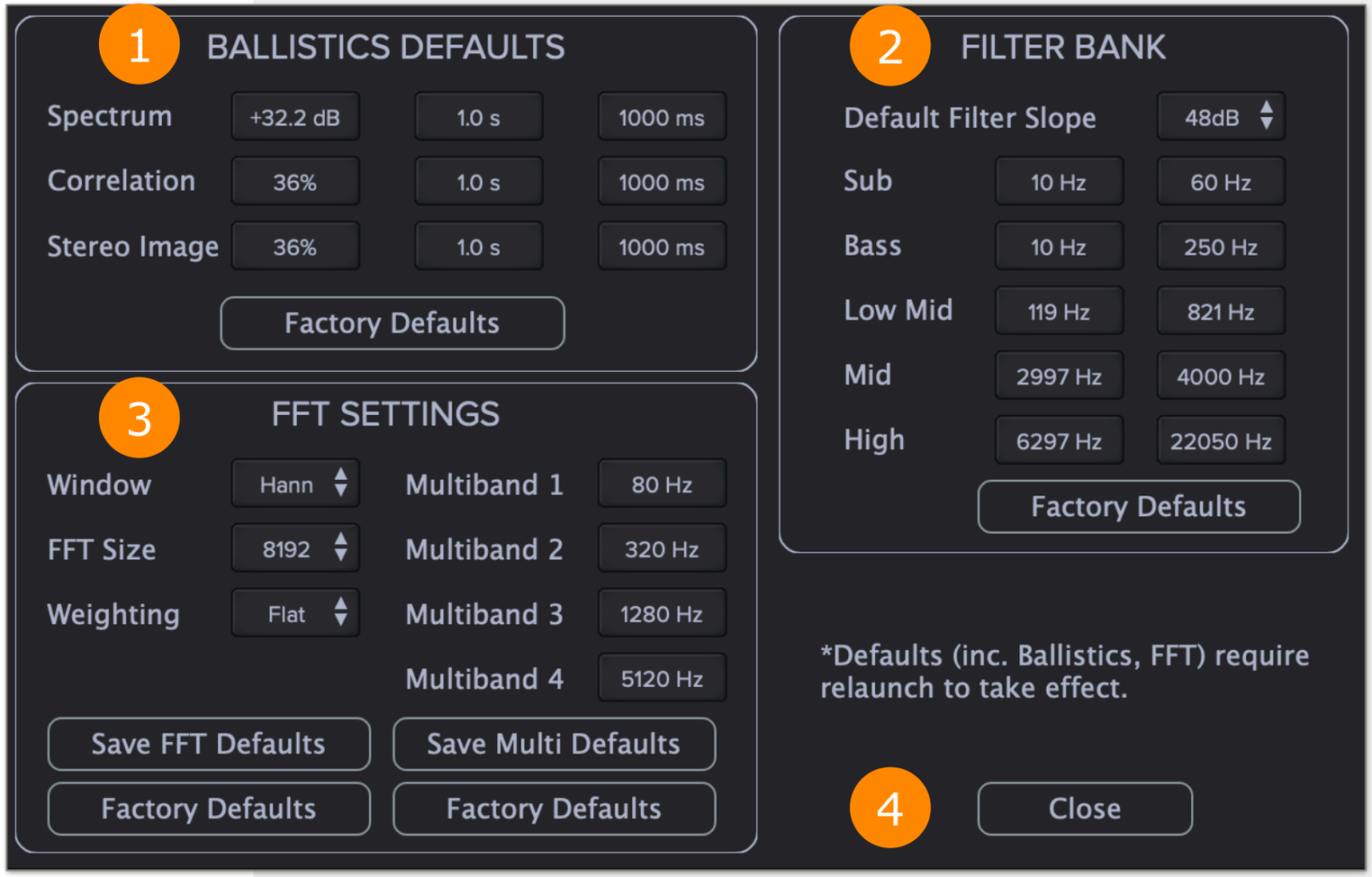
Click the **Factory Defaults** button underneath each group to restore the factory settings.

3 Close

Closes the Settings window. You can also use the Settings Icon button on the analysis menu to close the window.

4 Filter Bank

Edit the default settings for the filter bank and filter slope. Please note, this does not edit the *current* settings. You can edit the current settings for the filter button presets and save them as defaults by right-clicking then preset button and selecting **Save as default**.



Defaults inc. Ballistics, FFT etc require a relaunch to take effect

THE ULTIMATE MIX REFERENCE AND ANALYSIS PLUGIN