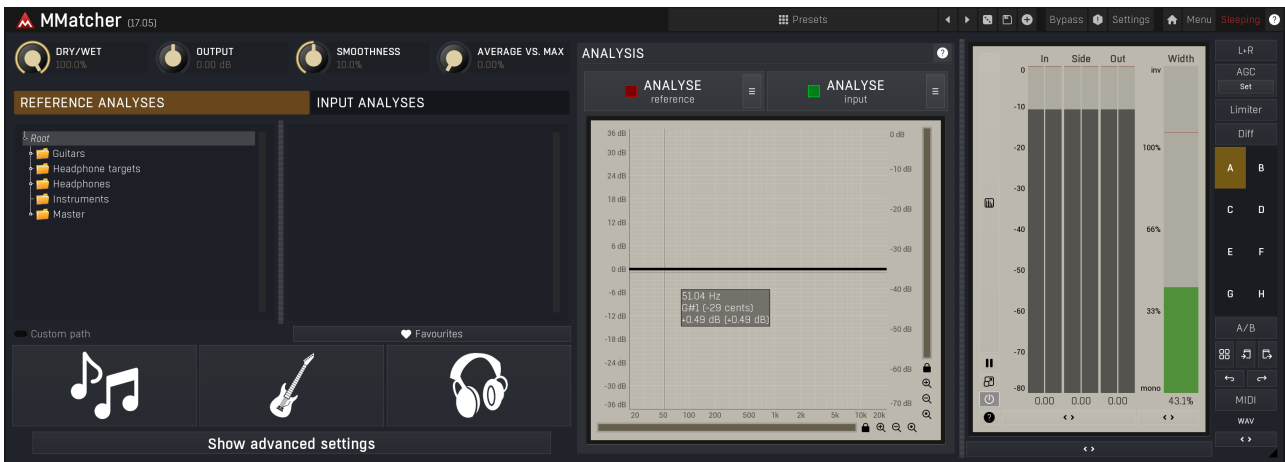


# MMatcher



## Overview

MMatcher is the ultimate spectrum-matching tool and is essential for every production. It is designed for a wide range of applications, which we will explore now.

## Matching Master Tracks

By default (or when you click the **Song** button), the plugin operates in master track matching mode. This means that most of the settings hidden under **Show advanced settings** are automatically configured for optimal results. To get started, select your reference track from the extensive database supplied with the plugin using the **Reference analyses** file selector. Alternatively, you can let the plugin analyze any song of your choice by dragging and dropping the file onto the **Analyse reference** button or using the menu inside it. Next, start playback of your audio, click the **Analyse input** button, and let your track play for as long as possible-or at least through the loudest section. Click the button again to stop the analysis, and the plugin will instantly match the spectrum, loudness, and stereo field to the reference track. This is essentially the process, but there are two additional controls you can fine-tune afterward: **Smoothness** - This controls how precisely the matching is applied. The default setting is usually ideal. Lowering the value will make the plugin more closely adapt to the reference spectrum, but this may not always be desirable - your track might be in a different key, use different instruments, etc. **Average vs. Max** - This determines whether the matching target is based on the average sound or the loudest moments of the song. The default setting generally works well, but feel free to experiment to achieve the desired results.

## Matching Guitars and Basses

The plugin includes a vast, community-created database of dry electric guitar and bass sounds for referencing. To access it, insert the plugin on a dry input and click the **Guitar** button at the bottom, which will configure the settings for you.

Next, click the **Analyse input** button, and play across the full range of your instrument for a while. Then, stop the analysis by clicking the button again. Once the analysis is complete, you can save it by clicking the menu button inside the **Analyse input** button and selecting "Save".

Next, explore different guitar sounds using the **Reference analyses** file selector. Keep in mind that every guitar and playing style is unique, but this feature offers an incredible playground for guitarists looking to experiment with their sound.

## Matching Headphones

Mixing and mastering on headphones is becoming increasingly common. It's more affordable than investing in high-end monitors and treated rooms, and it can work just fine. However, headphone frequency response varies significantly, and none are truly perfect. That's what we're here to fix.

Start by putting the plugin as the last item in your processing chain. Most high-end DAWs such as Reaper or Cubase have a way to keep a plugin like this in a "control room", so that it is used no matter of the project you are working on. Next, click the **Headphones** button at the

bottom, which will set things up for you. Then, select your headphone model using the **Input analyses** file selector. We've included hundreds of headphone analyses sourced from this database. There may be multiple analyses of your headphones model. This is because we use several sources, which measured them and they all came with slightly different results.

*If your headphones aren't listed, you can try analyzing pink noise using a flat-response measurement microphone placed next to one of the headphone speakers. However, the results may be very inaccurate. Headphone measurements are done on specialized gear mimicking human heads and specially calibrated mics, which are extremely expensive.*

### And that's it... or is it?

When listening on studio monitors, your head and ears naturally shape the sound. This makes the definition of an "ideal" sound somewhat tricky - everyone's head and ears are different. Does that mean mixing and mastering on headphones is a mistake? Not at all! In fact, if most audiophiles today listen to music on headphones, then mixing and mastering with them makes more sense than using studio monitors. By 2025, this may very well be the case. If your goal is to mix for headphone listeners, you can select the "All headphones average" or "All headphones median" reference.

However, in most situations, we can't assume listeners will be using headphones. That's why various references, such as Harman, Innerfidelity, and Rtings, have gained popularity. We've combined these (and more) into what we believe is the most accurate target, which is selected by default as the "Default" reference. If you already have a strong sense of your ideal sound from a high-end studio, you can simply switch between different references and choose the one that best matches your preference.

What About the "Flat" Reference? In a studio environment, we aim for a flat frequency response, where all frequencies are balanced. However, when using monitors, your head and ears naturally shape the sound - mainly acting as a low-pass filter. This doesn't happen with headphones. As a result, the Flat reference often sounds overly bright because it bypasses that natural filtering. That said, most of us don't have perfect hearing, and very few can hear all the way up to the 20kHz range typically considered the human hearing limit. In that case, using a Flat response could be beneficial - it enhances the top end, making it easier to perceive high frequencies. If you go this route, make sure to listen to commercial tracks on your headphones as well. This will help your ears adjust to the sound profile properly.

## Treating Your Studio Monitors

Studio monitors are rarely perfectly flat, meaning that not all frequencies are represented at the same level. Studio rooms often make this even worse. While there are specialized solutions for this issue, you can achieve a simple yet effective fix using MMatcher. All you need is a measurement microphone with a flat response. These are fairly inexpensive - while they don't sound great for regular recording, they are excellent for measurement purposes.

Step 1: Insert the plugin on a track recording the measurement microphone and click the **Headphones** button at the bottom to configure the settings. Although this mode is intended for headphones, it works similarly for studio monitors.

Step 2: Play a test signal. To measure your monitors accurately, you need a test signal that contains all frequencies at equal levels over equal time intervals. You have a few options:

Use MNoiseGenerator to generate pink noise and play it through your monitors.

Use MOscillator and set it to generate sine sweeps.

Download a sine sweep file and play it manually. Make sure to play the test signal at normal listening levels.

Step 3: Capture the analysis. Place the measurement microphone where one of your ears would normally be when listening. Click the **Analyse reference** button and let the plugin analyze the signal. Feel free to play the test sound multiple times. Save the analysis to a dedicated folder. Repeat the process for your other ear's position.

(Optional) Take additional measurements from nearby listening positions to capture variations in your studio.

Step 4: Average the measurements. Once you've collected multiple analyses, make sure they are all in the same folder, with no other files. First, review each analysis to see how sound differs across locations. Then, click **Analyse reference / Menu** and select **Average analyses**. This will combine all the measurements into a single analysis, representing your studio's overall response. Save the averaged analysis and load (or copy/paste) it as your **Input analysis**.

Finally, select your desired reference-typically, the Flat reference is the best choice for monitor correction.

While this approach (and other studio correction methods) can improve accuracy, there are limits to what can be fixed. If your studio has extreme sound variations in different locations, loud standing waves, or excessive echoes, no correction tool can fully resolve these issues. Proper acoustic treatment may still be necessary.

### Presets

### Presets

Presets button shows a window with all available presets. A preset can be loaded from the preset window by double-clicking on it, selecting via the buttons or by using your keyboard. You can also manage the directory structure, store new presets, replace existing ones etc. Presets are global, so a preset saved from one project, can easily be used in another. The arrow buttons next to the preset button can be used to switch between presets easily.

Holding **Ctrl** while pressing the button loads a random preset. There must be some presets for this feature to work of course.

Presets can be backed up by 3 different methods:

A) Using "Backup" and "Restore" buttons in each preset window, which produces a single archive of all presets on the computer.

B) Using "Export/Import" buttons, which export a single folder of presets for one plugin.

C) By saving the actual preset files, which are found in the following directories (not recommended):

Windows: C:\Users\{username}\AppData\Roaming\MeldaProduction  
Mac OS X: /Library/Application support/MeldaProduction

Files are named based on the name of the plugin like this: "{pluginname}.presets", so for example MAutopan.presets or MDynamics.presets. If the directory cannot be found on your computer for some reason, you can just search for the particular file.

Please note that prior to version 16 a different format was used and the naming was "{pluginname}.presets.xml". *The plugin also supports an online preset exchange. If the computer is connected to the internet, the plugin connects to our server once a week, submits your presets and downloads new ones if available. This feature is manually maintained in order to remove generally unusable presets, so it may take some time before any submitted presets become available. This feature relies on each user so we strongly advise that any submitted presets be named and organised in the same way as the factory presets, otherwise they will be removed.*



### Left arrow

Left arrow button loads the previous preset.



### Right arrow

Right arrow button loads the next preset.



### Randomize

Randomize button loads a random preset.



### Save

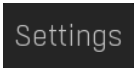
Save button replaces the current preset.



### Panic

Panic button resets the plugin state. You can use it to force the plugin to report latency to the host again and to avoid any audio problems. For example, some plugins, having a look-ahead feature, report the size of the look-ahead delay as latency, but it is inconvenient to do that every time the look-ahead changes as it usually causes the playback to stop. After you tweak the latency to the correct value, just click this button to sync the track in time with the others, minimizing phasing artifacts caused by the look-ahead delay mixing with undelayed audio signals in your host. It may also be necessary to restart playback in your host.

Another example is if some malfunctioning plugin generates extremely high values for the input of this plugin. A potential filter may start generating very high values as well and as a result the playback will stop. You can just click this button to reset the plugin and the playback will start again.



### Settings

Settings button shows a menu with additional settings of the plugin. Here is a brief description of the separate items.

**Licence manager** lets you activate/deactivate the plugins and manage subscriptions. While you can simply drag & drop a licence file onto the plugin, in some cases there may be a faster way. For instance, you can enter your user account name and password and the plugin will do all the activating for you.

There are 4 groups of settings, each section has its own detailed help information: **GUI & Style** enables you to pick the GUI style for the plugin and the main colours used for the background, the title bars of the windows and panels, the text and graphs area and the highlighting (used for enabled buttons, sliders, knobs etc).

**Advanced settings** configures several processing options for the plugin.

**Global system settings** contains some settings for all MeldaProduction plugins. Once you change any of them, restart your DAW if needed, and it will affect all MeldaProduction plugins.

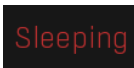
**Dry/Wet affects** determines, for Multiband plugins, which multiband parameters are affected by the Global dry/wet control.

**Smart interpolation** adjusts the interpolation algorithm used when changing parameter values; the higher the setting the higher the audio quality and the lower the chance of zippering noise, but more CPU will be used.



### WWW

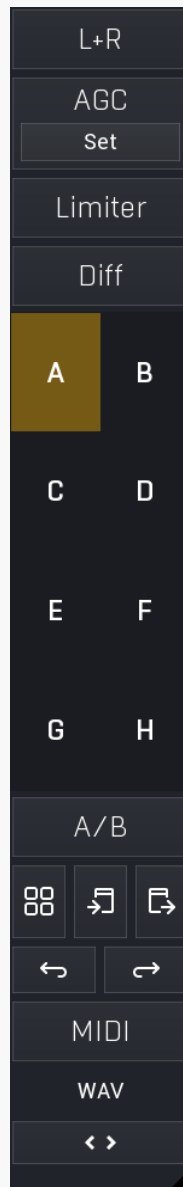
WWW button shows a menu with additional information about the plugin. You can check for updates, get easy access to support, MeldaProduction web page, video tutorials, Facebook/Twitter/YouTube channels and more.



### Sleep indicator

Sleep indicator informs whether the plugin is currently active or in sleep mode. The plugin can automatically switch itself off to save CPU, when there is no input signal and the plugin knows it cannot produce any signal on its own and it generally makes sense. You can disable this in Settings / **Intelligent sleep on silence** both for individual instances and globally for all plugins on the system.

# Plugin toolbar



Plugin toolbar provides some global features, A-H presets and more.

L+R

## Channel mode

Channel mode button shows the current processing channel mode, e.g. **Left+Right (L+R)** indicates the processing of left and right channels. This is the default mode for mono and stereo audio material and effectively processes the incoming signal as expected. However the plugin also provides additional modes, of which you may take advantage as described below. Mastering this feature will give you unbelievable options for controlling the stereo field.

Note that this is not relevant for mono audio tracks, because the host supplies only one input and output channel.

**Left (L) mode and Right (R) mode** allow the plugin to process just one channel, only the left or only the right. This feature has a number of simple uses. Equalizing only one channel allows you to fix spectral inconsistencies, when mids are lower in one channel for example. A kind of stereo expander can be produced by equalizing each side differently. Stereo expansion could also be produced by using a modulation effect, such as a vibrato or flanger, on one of these channels. Note however that the results would not be fully mono compatible.

Left and right channels can be processed separately with different settings, by creating two instances of the plugin in series, one set to 'L' mode and the other to 'R' mode. The instance in 'L' mode will not touch the right channel and vice versa. This approach is perfectly safe and is even advantageous, as both sides can be configured completely independently with both settings visible next to each other.

**Mid (M) mode** allows the plugin to process the so-called mid (or mono) signal. Any stereo signal can be transformed from left and right, to mid and side, and back again, with minimal CPU usage and no loss of audio quality. The mid channel contains the mono sum (or centre), which is the signal present in both left and right channels (in phase). The side channel contains the difference between the left and right channels, which is the "stereo" part. In 'M mode' the plugin performs the conversion into mid and side channels, processes mid, leaves side intact and converts the results back into the left and right channels expected by the host.

To understand what a mid signal is, consider using a simple gain feature, available in many plugins. Setting the plugin to M mode and decreasing gain, will actually lower or attenuate the mono content and the signal will appear "wider". There must be some stereo content present, this will not work for monophonic audio material placed in stereo tracks of course. Similarly amplifying the mono content by increasing the gain, will make the mono content dominant and the stereo image will become "narrower".

As well as a simple gain control there are various creative uses for this channel mode.

Using a **compressor** on the mid channel can widen the stereo image, because in louder parts the mid part gets attenuated and the stereo becomes more prominent. This is a good trick to make the listener focus on an instrument whenever it is louder, because a wider stereo image makes the listener feel that the origin of the sound is closer to, or even around them.

A **reverb** on the mid part makes the room appear thin and distant. It is a good way to make the track wide due to the existing stereo content, yet spacey and centered at the same time. Note that since this effect does not occur naturally, the result may sound artificial on its own, however it may help you fit a dominant track into a mix.

An **equalizer** gives many possibilities - for example, the removal of frequencies that are colliding with those on another track. By processing only the mid channel you can keep the problematic frequencies in the stereo channel. This way it is possible to actually fit both tracks into the same part of the spectrum - one occupying the mid (centre) part of the signal, physically appearing further away from the listener, the other occupying the side part of the signal, appearing closer to the listener.

Using various **modulation effects** can vary the mid signal, to make the stereo signal less correlated. This creates a wider stereo image and makes the audio appear closer to the listener.

**Side (S) mode** is complementary to M mode, and allows processing of only the side (stereo) part of the signal leaving the mid intact. The same techniques as described for M mode can also be applied here, giving the opposite results.

Using a **gain** control with positive gain will increase the width of the stereo image.

A **compressor** can attenuate the side part in louder sections making it more monophonic and centered, placing the origin a little further away and in front of the listener.

A **reverb** may extend the stereo width and provide some natural space without affecting the mid content. This creates an interesting side-effect - the reverb gets completely cancelled out when played on a monophonic device (on a mono radio for example). With stereo processing you have much more space to place different sounds in the mix. However when the audio is played on a monophonic system it becomes too crowded, because what was originally in two channels is now in just one and mono has a very limited capability for 2D placement. Therefore getting rid of the reverb in mono may be advantageous, because it frees some space for other instruments.

An **equalizer** can amplify some frequencies in the stereo content making them more apparent and since they psycho acoustically become closer to the listener, the listener will be focused on them. Conversely, frequencies can be removed to free space for other instruments in stereo.

A **saturator / exciter** may make the stereo richer and more appealing by creating higher harmonics without affecting the mid channel, which could otherwise become crowded.

**Modulation effects** can achieve the same results as in mid mode, but this will vary a lot depending on the effect and the audio material. It can be used in a wide variety of creative ways.

**Mid+Side (M+S)** lets the plugin process both mid and side channels together using the same settings. In many cases there is no difference to L+R mode, but there are exceptions.

A **reverb** applied in M+S mode will result in minimal changes to the width of the stereo field (unless it is true-stereo, in which case mid will affect side and vice versa), it can be used therefore, to add depth without altering the width.

A **compressor** in M+S mode can be a little harder to understand. It basically stabilizes the levels of the mid and side channels. When channel linking is disabled in the compressor, you can expect some variations in the sound field, because the compressor will attenuate the louder channel (usually the mid), changing the stereo width depending on the audio level. When channel linking is enabled, a compressor will usually react similarly to the L+R channel mode.

**Exciters or saturators** are both nonlinear processors, their outputs depend on the level of the input, so the dominant channel (usually mid) will be saturated more. This will usually make the stereo image slightly thinner and can be used as a creative effect.

**How to modify mid and side with different settings?** The answer is the same as for the L and R channels. Use two instances of the plugin one after another, one in M mode, the other in S mode. The instance in M mode will not change the side channel and vice versa.

**Left+Right(neg) (L+R-) mode** is the same as L+R mode, but the the right channel's phase will be inverted. This may come in handy if the L and R channels seem out of phase. When used on a normal track, it will force the channels out of phase. This may sound like an extreme stereo expansion, but is usually extremely fatiguing on the ears. It is also not mono compatible - on a mono device the track will probably become almost silent. Therefore be advised to use this only if the channels are actually out of phase or if you have some creative intent.

There are also 4 subsidiary modes: **Left & zero Right (L(R0))**, **Right & zero Left (R(L0))**, **Mid & zero Side (M(S0))** and **Side & zero Mid (S(M0))**. Each of these processes one channel and silences the other.

**Surround mode** is not related to stereo processing but lets the plugin process up to 8 channels, depending on how many the host supplies. For VST2 plugins you have to first activate surround processing using the **Activate surround** item in the bottom. This is a global switch for all MeldaProduction plugins, which configures them to report 8in-8out capabilities to the host, on loading. It is disabled by default, because some hosts have trouble dealing with such plugins. After activation, restart your host to start using the surround capabilities of the plugins. Deactivation is done in the same way. Please note that all input and output busses will be multi-channel, that includes side-chain for example. For VST3/AU/AAX plugins the activation is not necessary.

First place the plugin on a surround track - a track that has more than 2 channels. Then select **Surround** from the plugin's Channel Mode menu. The plugins will regard this mode as a natural extension of 2 channel processing. For example, a compressor will process each channel separately or measure the level by combining the levels of all of the inputs provided. Further surround processing properties, to enable/disable each channel or adjust its level, can be accessed via the **Surround settings** in the menu.

**Ambisonics mode** provides support for the modern 3D systems (mostly cinema and VR) with up to 64 channels (ambisonics 7th order). Support for this is still quite rare among the DAWs, so this needs to be activated in all DAWs using the **Activate ambisonics** item in the bottom. This is a global switch for all MeldaProduction plugins, which configures them to report 64in-64out capabilities to the

host, on loading. After activation, restart your host to start using the ambisonics capabilities of the plugins. Deactivation is done in the same way. Please note that all input and output busses will be multi-channel, that includes side-chain for example.

First place the plugin on an ambisonics track, supported are all orders from 1st (4 channels) to 7th (64 channels). Then select **Ambisonics** from the plugin's Channel Mode menu. Finally select the **Ambisonics settings** in the menu and configure the Ambisonics order and other settings if needed. The plugins will regard this mode as a natural extension of 2 channel processing. For example, a compressor will process each channel separately or measure the level by combining the levels of all of the inputs provided.

AGC

Set

## AGC

AGC button enables or disables the automatic gain control - the automatic adjustment of the output volume such that it matches the input volume. Human hearing is very adaptable. In fact differences in loudness, for example when loading a preset, may go unnoticed and instead be perceived by the listener as "better sounding", leading to a misjudgement. This feature should prevent this effect, thus allowing the listener to focus on the sonic qualities only.

AGC works by measuring input and output loudness, and then compensating for the difference while also taking into account any induced latency. The loudness measurement follows the ITU and EBU specifications with an RMS of 400ms, meaning that the reaction time is 400ms. This is very important, as you should be aware that AGC needs time to properly adjust after any change of settings. Also note that this is a nonlinear operation. It may cause some distortion due to the long measurement time. It should be negligible though.

AGC makes sense in most applications including reverberation and equalization for example. However, in some cases it can work against the plugin. A simple example of this is a tremolo, where the plugin manipulates output volume. If the tremolo rate is slow enough, say 1Hz, it makes the period longer than the actual AGC measurement time. So whenever the tremolo changes audio level, the AGC starts compensating for it. This can of course be used creatively, since AGC will always be a little "late", but it is definitely not a desired outcome in normal use.

Another example of this is compression. When used with short attack and release times, AGC can effectively compensate for the attenuation of the compressor. However when the attack and release times are higher than 100ms, the compressor's reaction time becomes too slow, and in conjunction with AGC, severe pumping can occur.

As a general rule of thumb as for all audio processing tasks, use it only if you know you need it. AGC is a powerful tool that can make your workflow easier, but it can also be damaging.

Set

## Set

Set button uses the AGC (automatic gain compensation) processor to calculate the ideal output gain to ensure that the output audio loudness is equal to the input level. To use it, simply enable playback in your host and click the button. The plugin's output gain will be adjusted to match the input and output levels as closely as possible.

If the AGC is already enabled, the change will be instant and you can disable the AGC afterwards. Typically you will browse presets, generate random settings etc. During the entire time you will have AGC enabled to prevent you from experiencing different output loudness levels. When you find a sonically ideal setup, you simply click the Set button to set the output gain automatically and disable the AGC as you won't need it anymore.

If the AGC is not already enabled, clicking the Set button displays a window with progress bar for a few seconds, while the plugin temporarily enables AGC and analyses input and output of the plugin. After that the AGC is disabled again.

To get the best results, you should feed the plugin with some "universal" signal. If you are processing a specific instrument, play a typical part, a chorus in case of vocals for example. If you are creating presets designed for general use, white/pink noise may be the best signal to use.

Limiter

## Limiter

Limiter button enables or disables the safety limiter. Its purpose is to protect you from peaks above 0dB, which can have damaging effects to your processing chain, your monitors and even your hearing.

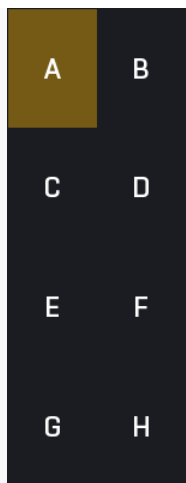
It is generally advised to keep your audio below 0dB at all times in all stages of your processing chain. However, several plugins may cause high level outputs with certain settings, often due to unprevented resonances with specific audio materials. The safety limiter prevents that.

Note that it is NOT wise to enable this "just in case". As with any processing, the limiter requires additional processing power and modifies the output signal. It is a transparent single-band brickwall limiter, but you still need to be careful when using it.

Diff

## Diff

Diff button lets you audition the difference between input and output. This is especially useful for dynamic processors, such as compressors, where you can simply listen to the parts being modified. The output may give you insight about which parts of the signal are being processed and how.



### A-H presets selector

A-H presets selector controls the current A-H preset. This allows the plugin to store up to 8 sets of settings, including those parameters that cannot be automated or modulated. However it does not include channel mode, oversampling and potentially some other global controls available from the Settings/Settings menu.

For example, this feature can be used to keep multiple settings, when you are not sure about the ideal configuration. When you change any parameter, only the currently selected preset is modified.

The four buttons below enable you to switch between the last 2 selected sets using the A/B button, morph between the first 4 sets using the morphing button and copy & paste settings from one preset to another (via the clipboard).

It is also possible to switch between the presets using MIDI program change messages sent from your host. The set selected depends on the Program Change number: 0 selects A, 7 selects H, 8 selects A, 15 selects H and so on.



### A/B

A/B button switches between the active and previously active A-H preset (not necessarily the A and B presets themselves). To compare any 2 of the A-H presets, select one and then the other. Clicking this button will then switch between these two. You can do the same thing by clicking on the particular presets, but this makes it easier, letting you close your eyes and just listen.



### Morph

Morph button lets you morph between the A, B, C and D settings. Morphing only affects those parameters that can be automated or modulated; that does include most of the parameters however. When you click this button, an X/Y graph is shown allowing you to drag the position indicator to any position between the letters A, B, C and D. The closer you drag the indicator to one of the letters, the closer the actual settings are to that preset.

**Please note that this will overwrite and change the preset that is currently selected, so it is best to select a new preset e.g. 'E', then use the morphing method. This way you will define the settings for A, B, C and D, morph between them, and store the result in 'E' without any modification of the original A, B, C and D presets.**

Please note that the ABCD morphing itself cannot be automated and that, while morphing, the changes to the underlying parameters are not notified to the host (there may be hundreds of change events).



### Copy

Copy button copies the current settings to the system clipboard.

Hold **Ctrl** to save the settings as a file instead. That may be necessary for complex settings, which may be too long for system clipboard to handle. It may also be advantageous when you want to send the settings via email. You can load the settings by drag & dropping them to a plugin or holding **Ctrl** and clicking **Paste**.



### Paste

Paste button pastes settings from the system clipboard into the current preset. Hold **Ctrl** to load the settings from a file instead. Hold **Shift** to paste the settings to all of the A-H slots at once.



### Undo

Undo button reverts the last change. Only changes to automatable or modulatable parameters and global settings (load/randomize) are stored.



### Redo

Redo button reverts the last undo operation.



### WAV

WAV button lets you process a file using the plugin with current settings. You can either click the button and select a file, or drag & drop

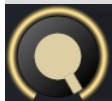
the file (or multiple files) onto the button. If you let the plugin process WAV files, these will be saved with the original settings. If you use a different file type (such as MP3), the plugin will create WAV files with 32-bit bits-per-sample floating point.

Please note that the files will be overwritten, so make a copy first if you want to keep the original.



### Collapse

Collapse button minimizes or enlarges the panel to release space for other editors.



DRY/WET  
100.0%

### Dry/Wet

Dry/Wet lets you lower the amount of processing. It is called Dry/Wet, but it is actually implemented in the core algorithm by changing the processing amount.

Range: 0.00% to 100.0%, default 100.0%

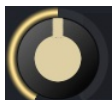


OUTPUT  
0.00 dB

### Output

Output defines the power modification applied to the output signal.

Range: -24.00 dB to +24.00 dB, default 0.00 dB

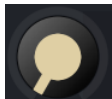


SMOOTHNESS  
10.0%

### Smoothness

Smoothness makes the analyzer smooth out the analysis curves to produce more natural results. The more natural also means less accurate, so you should always use your ears to set this value.

Range: 0.00% to 20.0%, default 10.0%



AVERAGE VS. MAX  
0.00%

### Average vs. Max

Average vs. Max controls the ratio between the 2 analysed spectrums - infinite average and maximum from temporal average. They respond differently when the audio material is changing the spectral properties. When you change this, the analysis graphs update and the matching is recalculated too.

Range: 0.00% to 100.0%, default 0.00%

REFERENCE ANALYSES

INPUT ANALYSES

Tab set

### for Reference and Input analyses

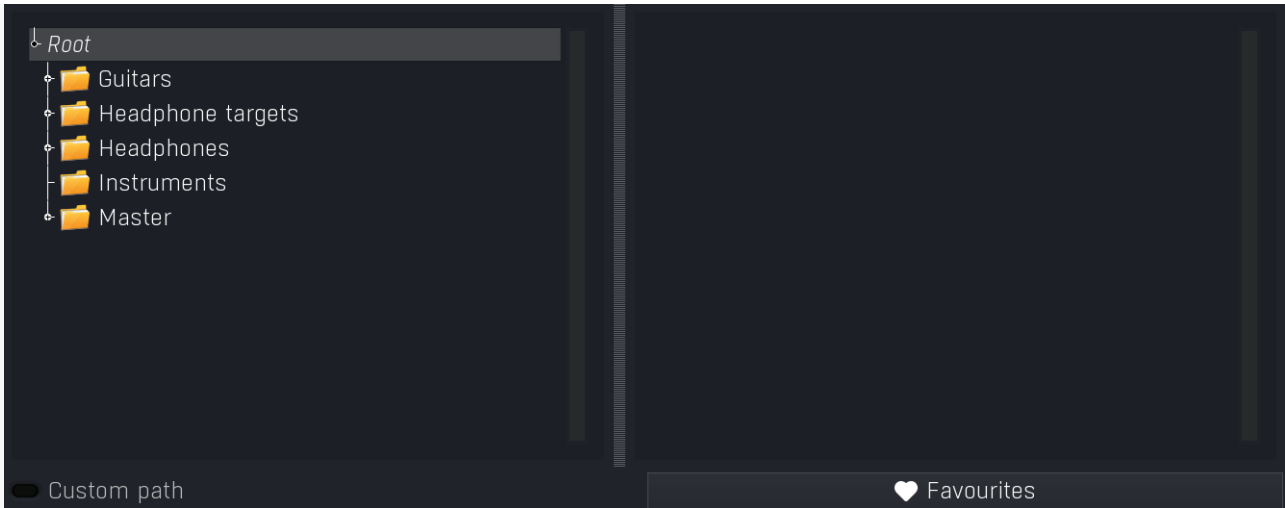
Tab set for Reference and Input analyses lets you load both of these from the huge database provided. For different matching situations, different selection may be needed.

When matching master tracks, you will likely only need the **Reference** files, and you will analyse your own input.

When matching guitars, the situation may be similar, but you may well match any guitar to any other guitar, no matter what instrument you are actually playing.

When matching headphones, you should select your headphones via **Input**, and use the **Reference** selector to select, how your headphones should sound. If unsure, just use the Default reference.

## File selector



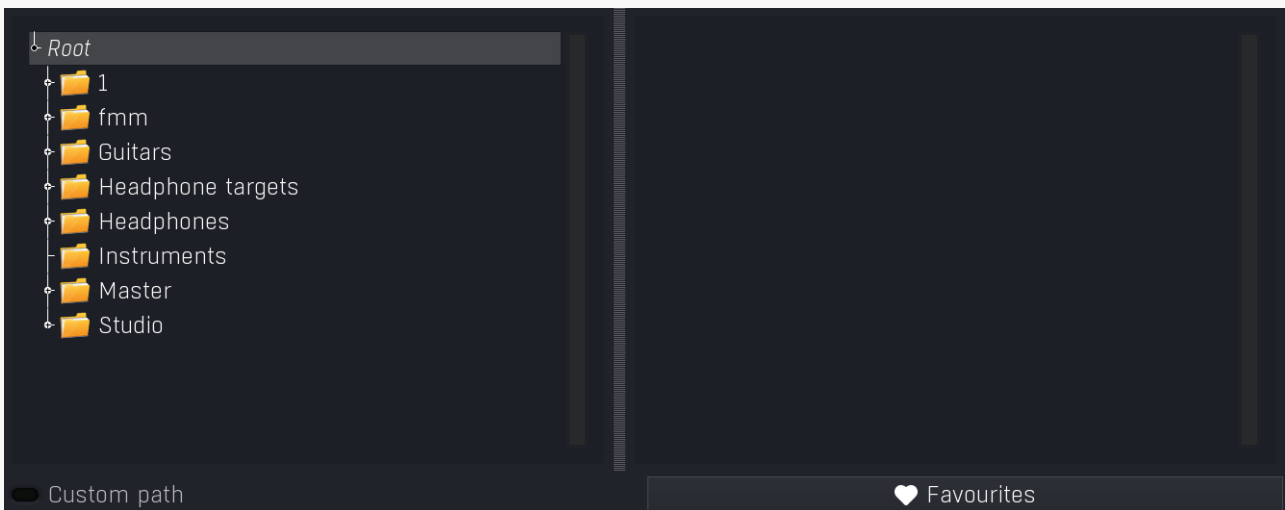
File selector displays the file selector for the Reference analyses.

♥ Favourites

### Favourites

Favourites button lets you manage your personal favourites. Since you may have several file libraries installed on your system, it may be clumsy to search for them every time. Instead you can simply store them in favourites and then quickly go to the particular location without exploring the whole system.

## File selector



File selector displays the file selector for the Input analyses.

♥ Favourites

### Favourites

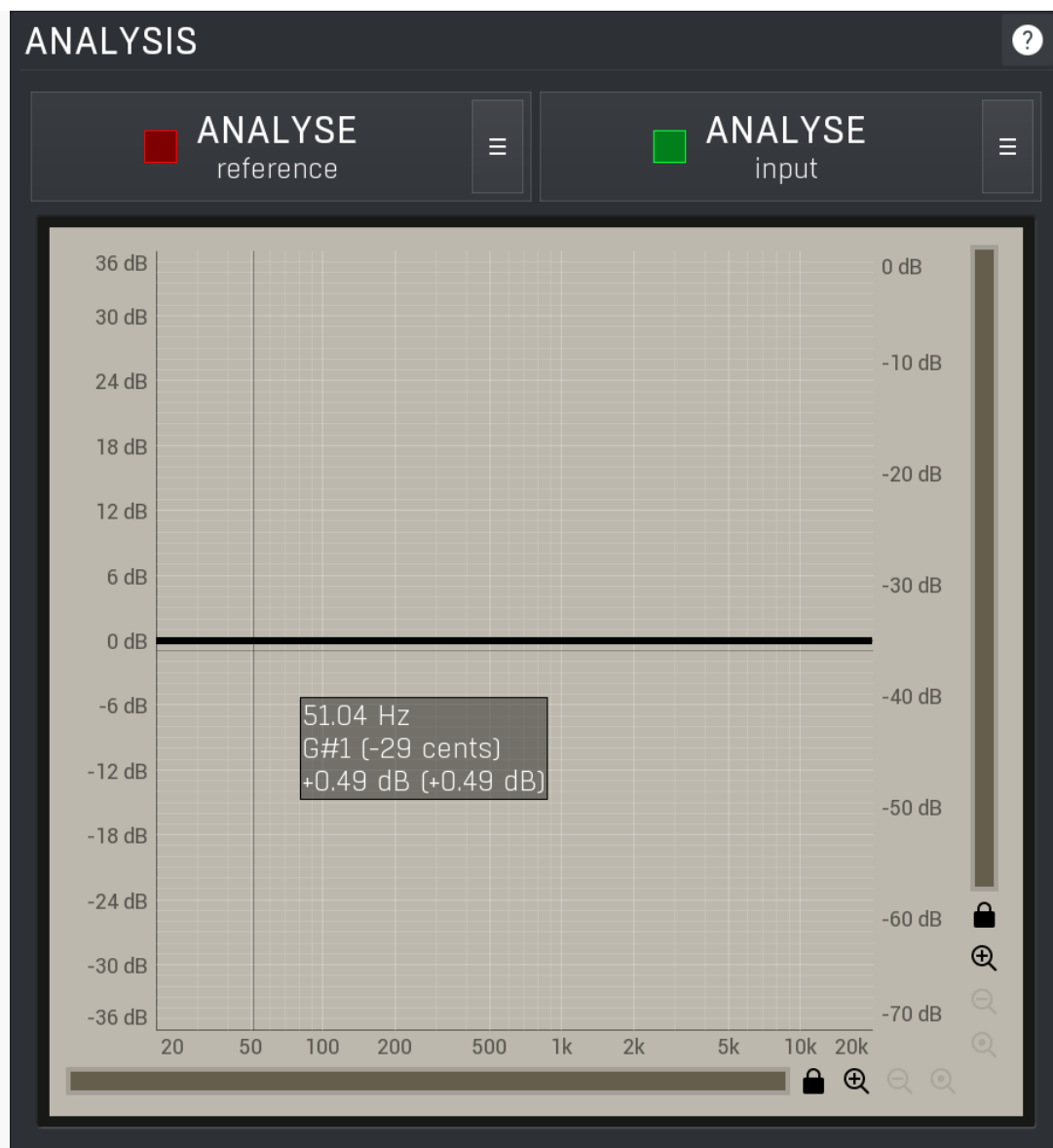
Favourites button lets you manage your personal favourites. Since you may have several file libraries installed on your system, it may be clumsy to search for them every time. Instead you can simply store them in favourites and then quickly go to the particular location without exploring the whole system.

## Show advanced settings

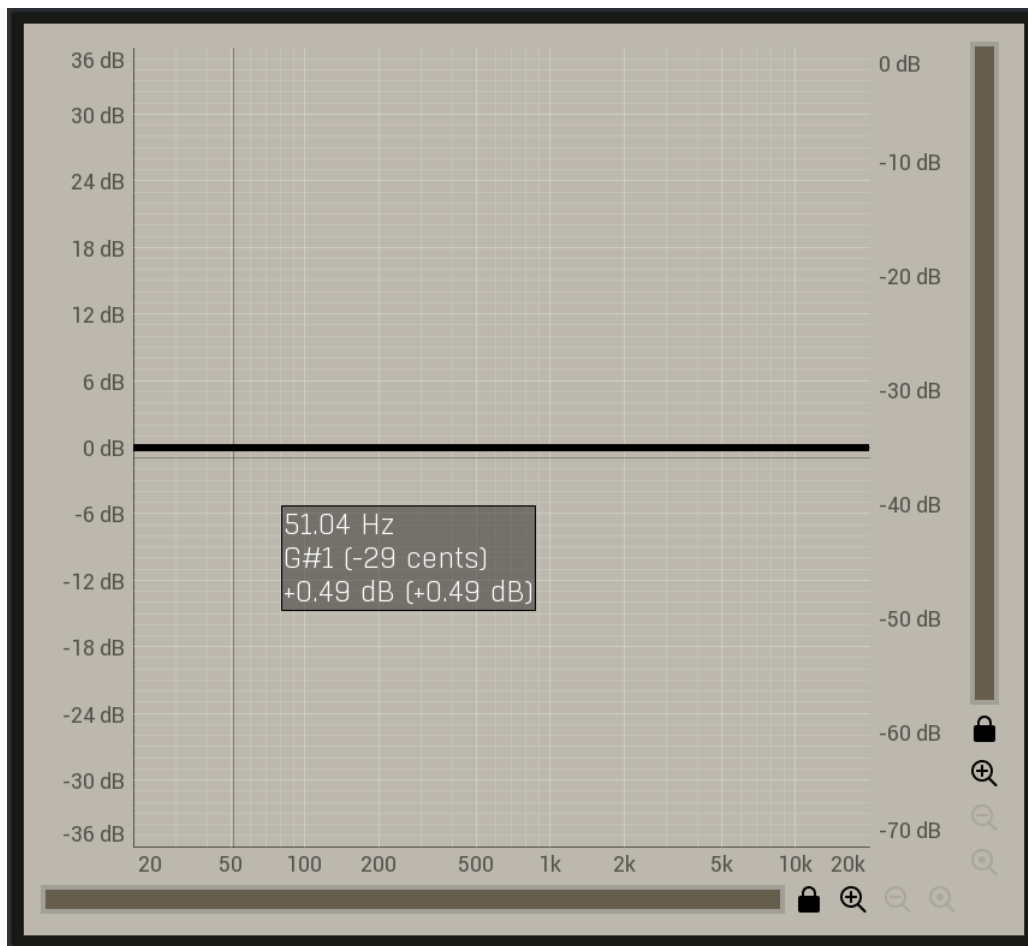
### Advanced settings

Advanced settings button displays additional settings.

## Analysis panel



Analysis panel lets you perform the analysis of both the **Input** and **Reference** audio materials. Once both analysis are available, the plugin performs all the processing. The detected curves and EQ curves are displayed in the analyzer pane. The thick curves show the mid signal and the thin show the side signal. In most cases the side signal level will be lower than the mid signal.



### Analyzer view

Analyzer view contains the different forms of analysis that you can display at once. This mainly consists of a powerful spectrum analyzer and sonogram.



### Analyze reference

Analyze reference button starts or stops the analysis of the sound "you want to get". In your host, route the ideal audio sample to the plug-in and start playback, then press this button to start the analysis. When the graph (shown as a **red line**) stops moving the analysis is finished and you can press the button again to complete the process.

Alternatively, you can analyze an audio file (WAV, MP3, FLAC etc.) offline by clicking the **File** button and browsing to the file or by dragging & dropping the file from your host or Explorer / Finder onto the **Analyze source** button (this latter method may not work in all hosts). Three other 3 buttons let you save and load an analysis or even draw the desired response manually.



### Menu button

Menu button displays a menu with features for the Reference analysis.

**Save** stores the current analysis as a file.

**Analyse side-chain** starts the analysis but instead of analysing the plugin input, it will analyse the side-chain input.

**Analyse file** loads an audio file and analyses it entirely. Alternatively it can also load a CSV file where each line specifies a frequency and the level in dB. This may be provided with your headphones or microphone by the manufacturer. The integrated headphone analysis database primarily comes from this source: **headphone measurements**. We regularly update it from this source. If you cannot find your headphone model in MMatcher, you can import its CSV file from there.

**Analyse folder** explores a specified folder, locates all audio (and other compatible files), analyses each of them and stores the analyses in a folder.

**Average analyses** loads all analyses in selected folder and creates an average from all of them.

**Average analyses (median)** loads all analyses in selected folder and creates a median from all of them. Median is similar to average, but instead of averaging all values, it sorts each of them and selects the middle one. It is usually more natural as it is not so affected by extreme deviations. However for it to work well, there needs to be a reasonably high number of analyses, say at least 10.

**Reset** clears the current analysis, marking it as "not available yet".

**Copy** copies the current analysis to system clipboard.

**Paste** pastes the current analysis from system clipboard.

**Submit** lets you send your analysis to our servers. Please use this only for well recorded and mixed signals. This will help us create a database of "how things should sound" and eventually improve your mixing workflow.

Remaining features are very technical and useful only by power users:

**Normalize** maximizes the levels, so that the analysis graph "touches" the top edge.

**Automatic slope** changes the slope of the analysis to make it as horizontal as possible.

**Invert** vertically inverts the levels of each frequency. It is useful to find "the opposite".

**Smoothen** imprints the current smoothness setting in the analysis. It is useful when preparing optimal references of headphones for example, so that you can make sure the reference will work well even if the user uses a small smoothness value.



### Analyze input

Analyze input button starts or stops the analysis of your audio to be manipulated. In your host, insert the plugin on the track to be processed and start playback, then press this button to start the analysis. When the graph (shown as a **green line**) stops moving the analysis is finished and you can press the button again to complete the process.

Alternatively, you can analyze an audio file (WAV, MP3, FLAC etc.) offline by dragging & dropping the file from your host or Explorer / Finder onto the **Analyze target** button (this may not work in all hosts). For instance, instead of playing the whole song back to get an accurate analysis you can render the song and analyse the output file, which will probably be faster.



### Menu button

Menu button displays a menu with features for the Input analysis. The features are identical to the menu button of the **ANALYSE reference** button.

## MMatcherAdvanced

# ADVANCED SETTINGS



Mid/Side

Keep level

Minimum phase

Individual channels for Reference

Individual channels for Input



FREQUENCY MIN

Off



FREQUENCY MAX

Off



FREQUENCY MIN SIDE

Off



FREQUENCY MAX SIDE

Off

Quality

1

2

3

4

5

6

7

8

Analytical smoothing

Off

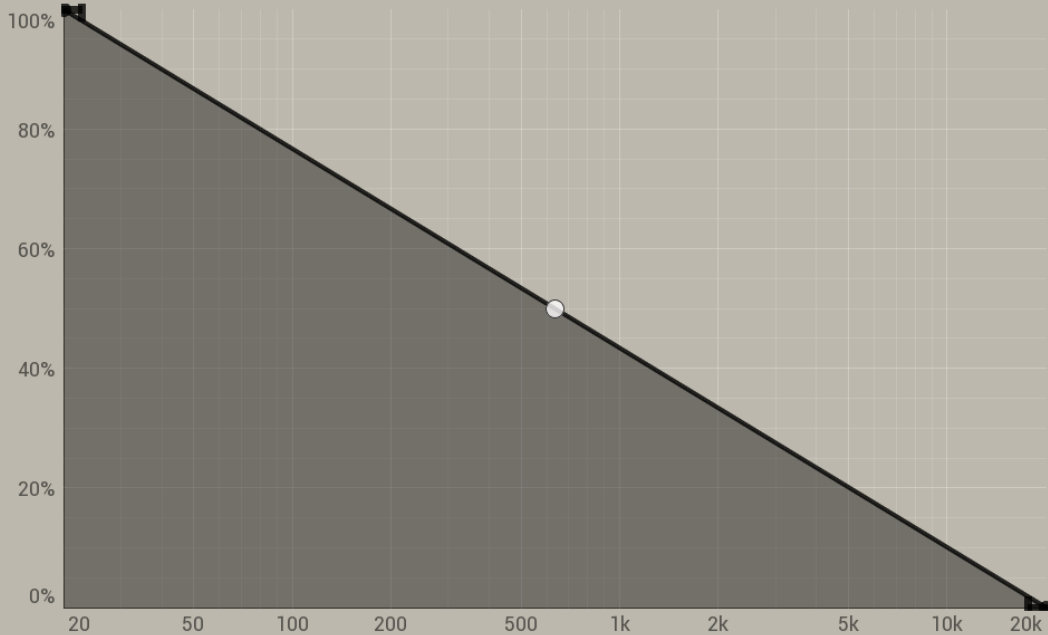
## SMOOTHING



MIN SMOOTHNESS RATIO

100.0%

### SMOOTHING PER FREQUENCY



Advanced settings window contains more advanced settings, which are used less often and so are intentionally not shown on the main plugin editor.

Mid/Side

### Mid/Side

Mid/Side option makes the engine assume the analysis of both Reference and Input are in-fact in mid/side channel modes, and the processing as well as the analysis is adjusted accordingly. This is optimal for processing masters, since we assume that left and right channels need to be balanced, but the mid/side will match the stereo field nature and width as well as the center. Note, the analyses of Reference and Input must match each other with this option.

Keep level

### Keep level

Keep level makes the engine keep the original level of the matched signal. That's good for adjusting guitars and mics for example, but not so much for matching the masters, where you also want to match the stereo field.

Minimum phase

### Minimum phase

Minimum phase switch activates the minimum phase mode, which has no latency, but alters the phase. That usually isn't relevant, but when used in separate track context, it may be. When disabled, the plugin will be processing in linear-phase mode, which doesn't alter the phase, but exhibits latency and has issues of its own.

The most typical difference between linear-phase and minimum-phase equalizers is in ringing, which is an inevitable part of their sound. You might imagine that each frequency being manipulated in some way has some sort of tail, which is especially audible when processing transient sounds. After each drum hit, for example, you can hear some sort of decay, a very short one, depending on what the equalizer does. While minimum phase equalizers produce this tail after the transient, linear-phase equalizers generate a tail BEFORE as well, called pre-ringing. That's a very unnatural thing as it essentially sounds like something that 'has not happened yet', and human ears are especially sensitive to that. This is what makes linear-phase equalizers sound inferior in many cases.

### Individual channels for Reference

### Individual channels for Reference

Individual channels for Reference makes the processing distinguish between multiple channels for Reference analysis. When this is disabled, it is assumed that the Reference has all channels identical. That is optimal for guitars for example, as even if the guitar is double-tracked, the spectrums should be similar in all channels in order to make the mix coherent. It is NOT optimal for processing masters however, since each channel may be different and masters should be also processed with **Mid/Side** option enabled to match the overall spectrum as well as the stereo width.

### Individual channels for Input

### Individual channels for Input

Individual channels for Input makes the processing distinguish between multiple channels for Input analysis. When this is disabled, it is assumed that the Input has all channels identical. That is optimal for headphones for example, as it is assumed that both speakers are more or less identical. It is NOT optimal for processing masters however, since each channel may be different and masters should be also processed with **Mid/Side** option enabled to match the overall spectrum as well as the stereo width.



#### FREQUENCY MIN

Off

#### Frequency Min

Frequency Min controls the minimum frequency the plugin will affect. It can be used to avoid changing the low end if, for example, your track has lots of subbass, which is not present in the **Reference** analysis.

Range: Off to 20.0 kHz, default Off



#### FREQUENCY MAX

Off

#### Frequency Max

Frequency Max controls the maximum frequency the plugin will affect. It can be used to avoid changing the brightness of your track for example.

Range: 20.00 Hz to Off, default Off



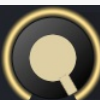
#### FREQUENCY MIN SIDE

Off

#### Frequency Min Side

Frequency Min Side controls the minimum frequency the plugin will affect on side signal. If set to minimum, it will be controlled by **Frequency Min**.

Range: Off to 20.0 kHz, default Off



#### FREQUENCY MAX SIDE

Off

#### Frequency Max Side

Frequency Max Side controls the maximum frequency the plugin will affect on side signal. If set to maximum, it will be controlled by **Frequency Max**.

Range: 20.00 Hz to Off, default Off

Quality

1

2

3

4

5

6

7

8

### Quality

Quality controls the processing size, hence also the latency and CPU requirements. The default **4** is more than adequate in most cases.

Range: 1 to 8, default 4

Analytical smoothing

Off

### Analytical smoothing

Analytical smoothing controls the way the smoothing works. 0% provides the standard smoothing algorithm. 100% provides the analytical algorithm, which doesn't change the proportions of frequencies with higher magnitudes. It is mainly provided for experimental reasons.

Range: Off to 100.0%, default Off

## Smoothing

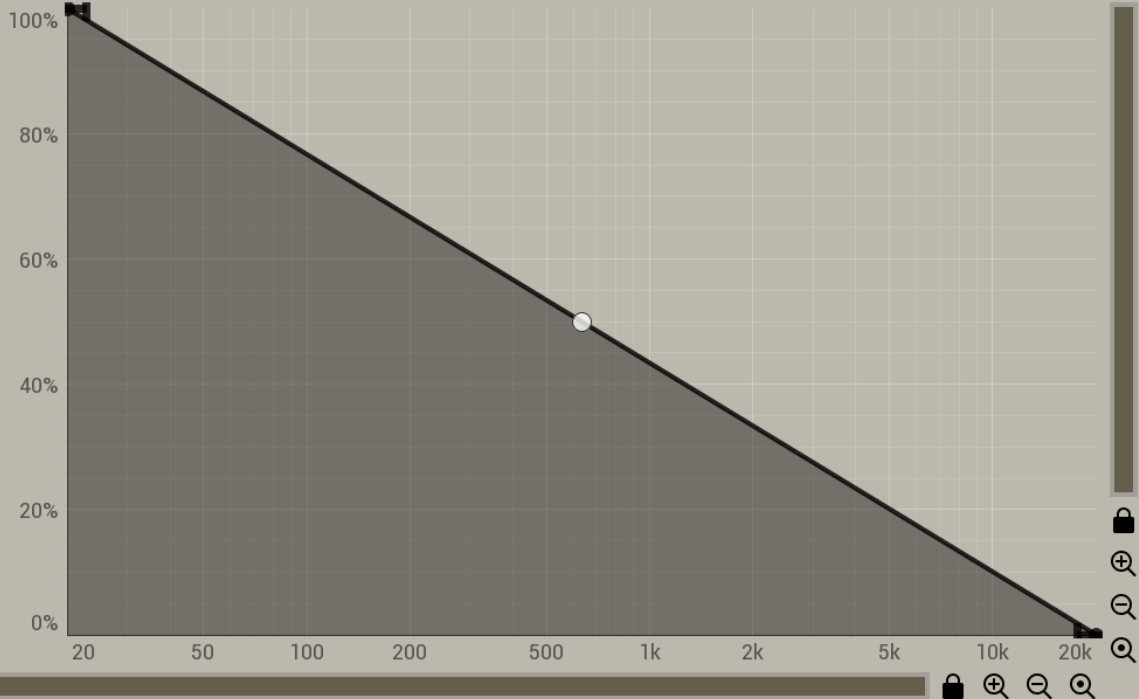
# SMOOTHING



MIN SMOOTHNESS RATIO

100.0%

## SMOOTHING PER FREQUENCY



MIN SMOOTHNESS RATIO

100.0%

### Min smoothness ratio

Min smoothness ratio controls the smoothness for frequencies with the graph at minimum (bottom), multiplicatively relative to the global smoothness. In other words, if the global **Smoothness** is 20% and this ratio is 50%, then for the frequencies with the graph at maximum the smoothing will be 20%, and for frequencies at minimum the smoothing will be 10%, since 50% of 20% is 10%.



### Presets

Presets button displays a window where you can load and manage available presets. Hold **Ctrl** when clicking to load a random preset instead.



### Left arrow

Left arrow button loads the previous preset.



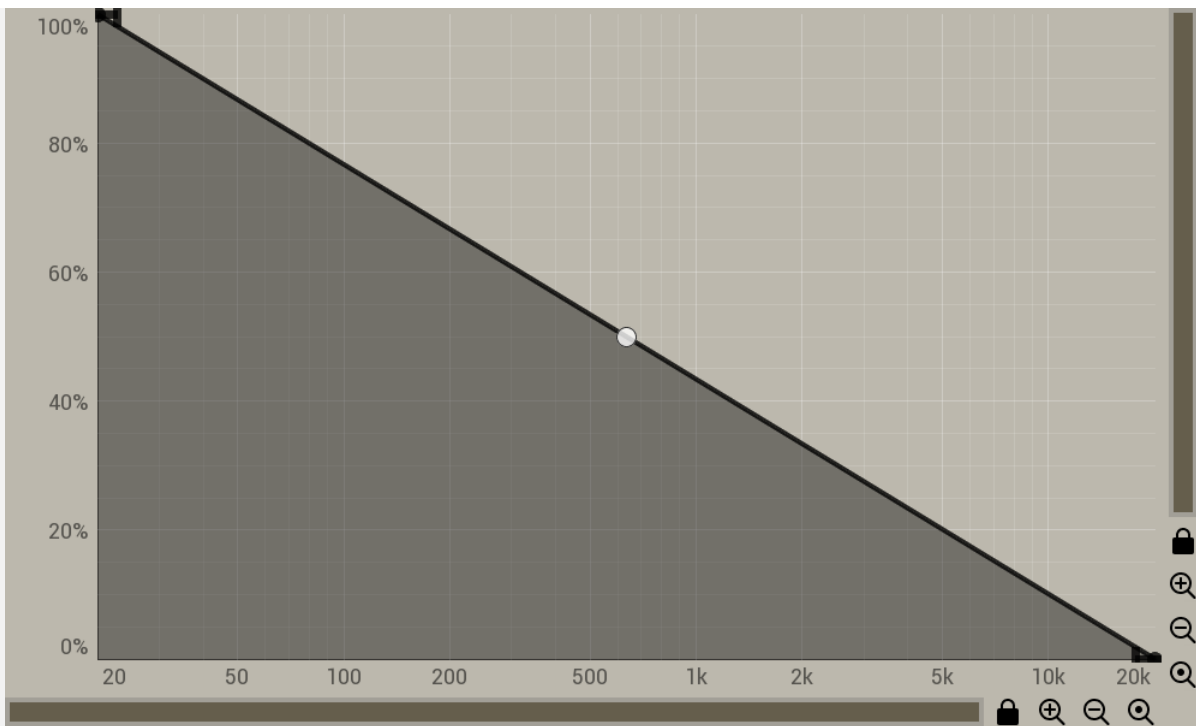
### Right arrow

Right arrow button loads the next preset.



### Randomize

Randomize button loads a random preset.



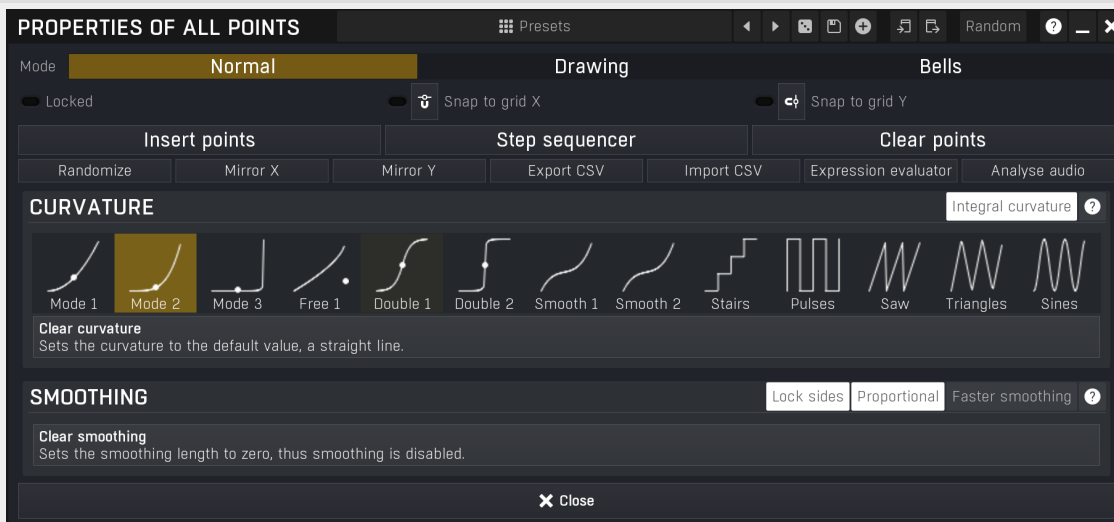
## EnvelopeEditorGraph

### Envelope graph

Envelope graph provides an extremely advanced way to edit any kind of shape that you can imagine. An envelope has a potentially unlimited number of points, connected by several types of curves with adjustable curvature (drag the dot in the middle of each arc) and the surroundings of each point can also be automatically smoothed using the smoothness (horizontal pull rod) control. You can also literally draw the shape in drawing mode (available via the main context menu).

- **Left mouse button** can be used to select points. If there is a *point*, you can move it (or the entire selection) by dragging it. If there is a *curvature circle*, you can set up its tension by dragging it. If there is a *line*, you can drag both edge points of it. If there is a *smoothing controller*, you can drag its size. Hold **Shift** to drag more precisely. Hold **Ctrl** to create a new point and to remove any points above or below.
- **Left mouse button double click** can be used to create a new point. If there is a *point*, it will be removed instead. If there is a *curvature circle*, zero tension will be set. If there is a *smoothing controller*, zero size will be set.
- **Right mouse button** shows a context menu relevant to the object under the cursor or to the entire selection. Hold **Ctrl** to create or remove any points above or below.
- **Middle mouse button** drag creates a new point and removes any points above or below. It is the same as holding Ctrl and dragging using left mouse button.
- **Mouse wheel** over a point modifies its smoothing controller. If no point is selected, then all points are modified.
- **Ctrl+A** selects all points. **Delete** deletes all selected points.

### Envelope graph menu



Envelope graph menu provides additional features which are used to edit the graph. Open the menu using right mouse button in the graph. Please note that if you select some points in the graph, or click on a point for example, the menu will be different and will cover only those features related to the selected set of points.

## Presets

Presets button displays a window where you can load and manage available presets. Hold **Ctrl** when clicking to load a random preset instead.



### Left arrow

Left arrow button loads the previous preset.



### Right arrow

Right arrow button loads the next preset.



### Randomize

Randomize button loads a random preset.



### Save

Save button replaces the current preset.



### Copy

Copy button copies the settings onto the system clipboard.



### Paste

Paste button loads the settings from the system clipboard.

Random

### Random

Random button generates random settings using the existing presets.



Locked

### Locked

Locked switch makes the selected/all points locked, so they cannot be moved or changed.



Snap to grid X

### Snap to grid X

Snap to grid X activates the snap to grid feature. Alternatively you can press **Alt** while dragging a point or selection.



Snap to grid Y

### Snap

Snap button activates the snap to grid feature. Alternatively you can press **Alt** while dragging a point or selection.

## Insert points

### Insert point

Insert point button creates a point at mouse position.

## Step sequencer

### Step sequencer

Step sequencer button generates the envelope from step sequencer.

## Clear points

### Clear points

Clear points button deletes all points.

Randomize

### Randomize

Randomize button slightly modifies the Y coordinates.

Mirror X

### Mirror X

Mirror X button inverts the X coordinates of all points.

Mirror Y

### Mirror Y

Mirror Y button inverts the Y coordinates of all points.

Export CSV

### Export CSV

Export CSV feature lets you export the graph to a CSV file. CSV file is a simple text format, which has multiple lines with X

and Y coordinates delimited by ';'. For example:

0.275;0.2  
0.438;0.5  
0.775;0.67

## Import CSV

### Import CSV

Import CSV feature lets you select a CSV file and imports the graph points from it. CSV file is a simple text format, which has multiple lines with X and Y coordinates delimited by ';'. For example:

0.275;0.2  
0.438;0.5  
0.775;0.67

## Expression evaluator

### Expression evaluator

Expression evaluator lets you generate points based on a mathematic formula. The only input variable is 'x', so as an example you may write  $\ln(x^3 + 1) - \sin(x \cdot x)$ .

Expression evaluator uses traditional C/C++ style formatting, which is natural for most people. It provides arithmetics, logical and conditional operators. Following terms are supported:

Constants: **pi**, **e**, **sqrt2**, **ln2**

Arithmetic operators:

**-a** inverts the sign, e.g. "-x" produces +2 for x=-2

**a+b** = addition

**a-b** = subtraction

**a\*b** = multiplication

**a/b** = division

**a%b** = modulo, remainder after division

**a^b** = power, e.g. "2^3" produces  $2 \cdot 2 \cdot 2 = 8$

Arithmetic functions:

**min(a,b)** = minimum of both values

**max(a,b)** = maximum of both values

**limit(a,min,max)** = a limited into the interval min..max

**to01(a,min,max)** = converts "a" as min..max to 0..1

**from01(a,min,max)** = converts "a" as 0..1 to min..max

**tom11(a,min,max)** = converts "a" as min..max to -1..1

**fromm11(a,min,max)** = converts "a" as -1..1 to min..max

Basic mathematic functions: **abs(x)** = absolute value, e.g.  $\text{abs}(-3) = 3$  **sqr(x)** =  $x \cdot x$  **sqrt(x)** = square root **exp(x)** = natural exponential  $e^x$  **ln(x)** = natural logarithm **log10(x)** = logarithm with base 10 **log(x, base)** = logarithm with specified base **inv(x)** =  $1/x$  **sgn(x)** = sign of x, -1 or 0 or +1 depending on  $x \cdot x$  **round(x)** = rounding to the nearest value **floor(x)** = rounding to the nearest lower value, e.g.  $\text{floor}(-2.3) = -3$  **ceil(x)** = rounding to the nearest higher value, e.g.  $\text{ceil}(-2.3) = -2$  **rand(x)** = random value from 0 to x

Functions for specific units:

**f01(a)** = converts "a" as frequency from 20..20000 into log scale 0..1

**ffrom01(a)** = converts "a" as 0..1 (log scale) to frequency from 20..20000

**ffrom01limit(a)** = same, but makes sure the output is in 20..20000 range

**f01range(a,min,max)** = converts "a" as frequency from min to max into log scale 0..1

**ffrom01range(a,min,max)** = converts "a" as 0..1 (log scale) to frequency from min to max

**ffrom01rangelimit(a,min,max)** = same, but makes sure the output is in min..max range

**todb(a)** = converts "a" as multiplier to dB value by calculating  $20 \cdot \log_{10}(a)$

**fromdb(a)** = converts "a" as dB value to multiplier by calculating  $10^{(a/20)}$

Trigonometric functions: **sin(x)**, **asin(x)**, **cos(x)**, **acos(x)**, **tan(x)**, **atan(x)**, **sinh(x)**, **cosh(x)**, **tanh(x)**

Logical operators:

**a==b** = comparison producing 1 if "a" and "b" are equal, 0 otherwise

**a!=b** = comparison producing 1 if "a" and "b" are NOT equal, 0 otherwise

**a<b** = comparison producing 1 if "a" is lower than "b", 0 otherwise

**a<=b** = comparison producing 1 if "a" is lower or equal to "b", 0 otherwise

**a>b** = comparison producing 1 if "a" is greater than "b", 0 otherwise

**a>=b** = comparison producing 1 if "a" is greater or equal to "b", 0 otherwise

**!a** = logical negation, 0 produces 1, 0 otherwise

**a&&b** = logical AND, produces 1 if both "a" and "b" are nonzero

**a||b** = logical OR, produces 1 if any of "a" and "b" are nonzero

**a^^b** = logical XOR, produces 1 if "a" and "b" are logically different

**a ? b : c** = if a is nonzero, then the result is b, otherwise it is c

## Analyse audio

### Analyse audio

Analyse audio lets you analyse a portion of an audio file at specified intervals, extract its level envelope and use those levels to construct the graph's curve.

## Curvature

CURVATURE

Integral curvature ?

Mode 1

Mode 2

Mode 3

Free 1

Double 1

Double 2

Smooth 1

Smooth 2

Stairs

Pulses

Saw

Triangles

Sines

Clear curvature

Sets the curvature to the default value, a straight line.

Integral curvature

## Integral curvature

Integral curvature makes the multi-curvature modes such as rectangles always have an integral number of items, e.g. 1, 2, 3, ... rectangles. If you disable this, it will be also possible to have for example 2.3 rectangles, which will however cause a discontinuity.

## Smoothing

SMOOTHING

Lock sides

Proportional

Faster smoothing ?

Clear smoothing

Sets the smoothing length to zero, thus smoothing is disabled.

Lock sides

## Lock sides

Lock sides makes the smoothing factor equal on both sides.

Proportional

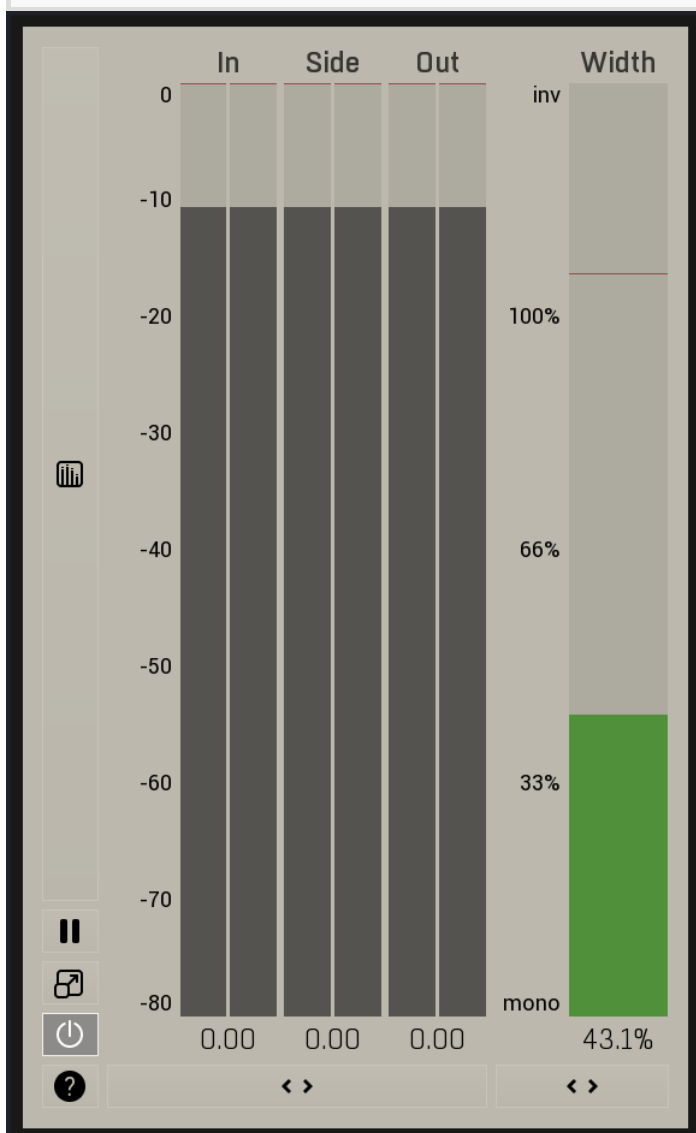
## Proportional

Proportional makes the smoothing area size defined by the smaller side.

Faster smoothing

## Faster smoothing

Faster smoothing enables slightly faster algorithm, which can however often cause unnecessary curving.



Global meter view provides a powerful metering system. If you do not see it in the plugin, click the **Meters** or **Meters & Utilities** button to the right of the main controls. The display can work as either a classical level indicator or, in time graph mode, show one or more values in time. Use the first button to the left of the display to switch between the 2 modes and to control additional settings, including pause, disable and pop up the display into a floating window. The meter always shows the actual channels being processed, thus in M/S mode, it shows mid and side channels.

In the classical level indicators mode each of the meters also shows the recent maximum value. Click on any one of these values boxes to reset them all.

**In meter** indicates the total input level. The input meter shows the audio level before any specific processing (except potential oversampling and other pre-processing). It is always recommended to keep the input level under 0dB. You may need to adjust the previous processing plugins, track levels or gain stages to ensure that it is achieved.

As the levels approach 0dB, that part of the meters is displayed with **red** bars. And recent peak levels are indicated by single bars.

**Out meter** indicates the total output level. The output meter is the last item in the processing chain (except potential downsampling and other post-processing). It is always recommended to keep the output under 0dB.

As the levels approach 0dB, that part of the meters is displayed with **red** bars. And recent peak levels are indicated by single bars.

**Width meter** shows the stereo width at the output stage. This meter requires at least 2 channels and therefore does not work in mono mode. Stereo width meter basically shows the difference between the mid and side channels.

When the value is **0%**, the output is monophonic. From 0% to 66% there is a green range, where most audio materials should remain.

**From 66% to 100%** the audio is very stereophonic and the phase coherence may start causing problems. This range is colored blue. You may still want to use this range for wide materials, such as background pads. It is pretty common for mastered tracks to lie on the edge of green and blue zones.

**Above 100%** the side signal exceeds the mid signal, therefore it is too monophonic or the signal is out of phase. This is marked using red color. In this case you should consider rotating the phase of the left or right channels or lowering the side signal, otherwise the audio will be highly mono-incompatible and can cause fatigue even when played back in stereo.

For most audio sources the width is fluctuating quickly, so the meter shows a 400ms average. It also shows the temporary maximum above it as a single coloured bar.

If you right click on the meter, you can enable/disable loudness pre-filtering, which uses EBU standard filters to simulate human perception. This may be useful to get a more realistic idea about stereo width. However, since humans perceive the bass spectrum as lower than the treble, this may hide phase problems in that bass spectrum.



## Time graph

Time graph button switches between the metering view and the time-graphs. The metering view provides an immediate view of the current values including a text representation. The time-graphs provide the same information over a period of time. Since different time-graphs often need different units, only the most important units are provided.



## Pause

Pause button pauses the processing.



## Popup

Popup button shows a pop-up window and moves the whole metering / time-graph system into it. This is especially useful in cases where you cannot enlarge the meters within the main window or such a task is too complicated. The pop-up window can be arbitrarily resized. In

metering mode it is useful for easier reading from a distance for example. In time-graph mode it is useful for getting higher accuracy and a longer time perspective.



### Enable

Enable button enables or disables the metering system. You can disable it to save system resources.



### Collapse

Collapse button minimizes or enlarges the panel to release space for other editors.



### Collapse

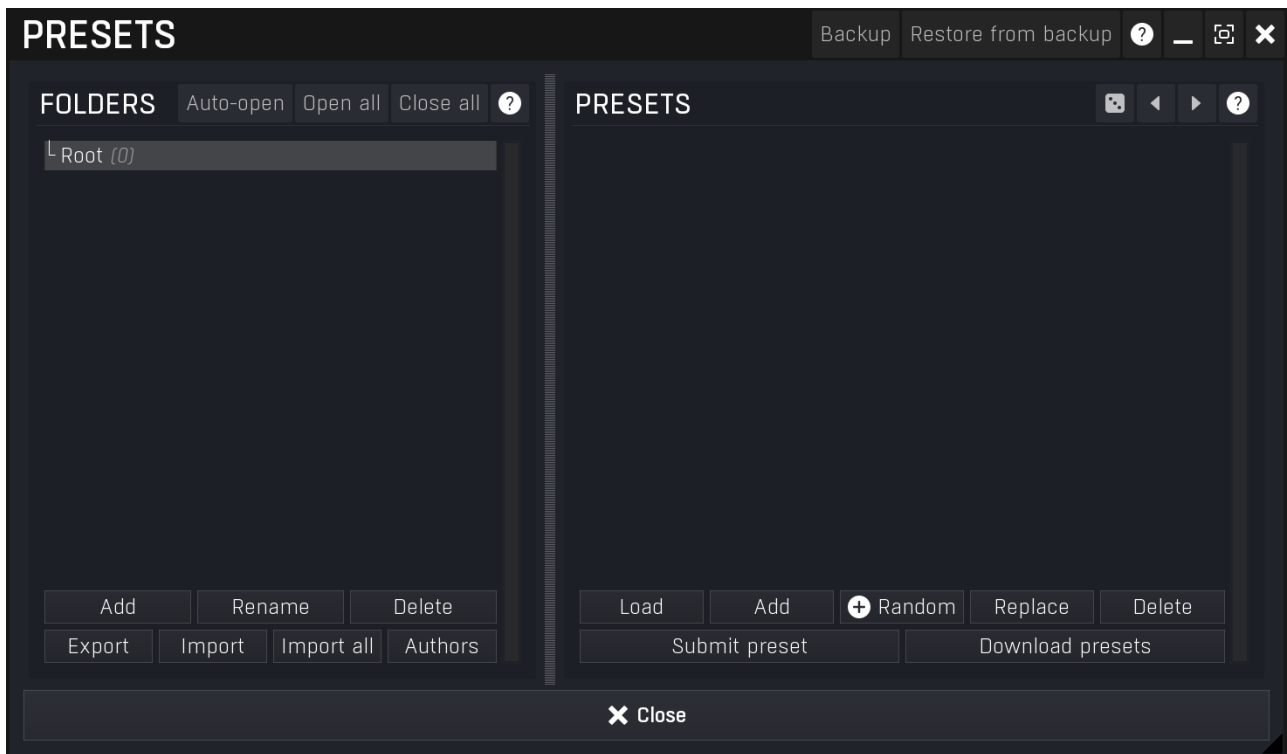
Collapse button minimizes or enlarges the panel to release space for other editors.



### Collapse

Collapse button minimizes or enlarges the panel to release space for other editors.

# Preset selector



Preset management window provides management for your presets.

Backup

## Backup

Backup button lets you backup presets for all MeldaProduction software into a single file, so you can transfer it to a different machine and restore the presets there for example.

Restore from backup

## Restore from backup

Restore from backup button lets you restore presets for all MeldaProduction software from a single file created by the **Backup** button.

## Folders tree



Folders tree lets you organize your presets into any number of folders. Use the buttons at the bottom of the window to create, rename or delete sub-folders. Note that these are not actual files & folders on disk, but are records in the preset database.

Auto-open

### Auto-open

Auto-open switch makes the tree automatically open selected items, so that all sub-folders are visible, whenever you select one. This makes it easier to browse through large structures containing many folders. The switch also makes the browser show all presets available in the selected folder including all sub-folders (except when you select the root folder).

Open all

### Open all

Open all button expands the whole tree, so you can see all of the folders. This may be handy when editing large preset structures.

Close all

### Close all

Close all button collapses the whole tree except for the root folder. This may be handy when editing large preset structures.

Add

### Add

Add button creates a new folder in the tree

Rename

### Rename

Rename button lets you rename the selected folder.

Delete

### Delete

Delete button deletes the folder including all the presets and subfolders in it.

Export

### Export

Export button lets you export the selected folder including all presets and sub-folders into a file, which you can then transfer to any computer. Or just use as a back-up.

Import

### Import

Import button lets you import a file containing presets and sub-folders and add it to the selected folder. The importer will ask you whether to destroy the original contents, so that the new presets replace previous ones, or to keep both.

Import all

### Import all

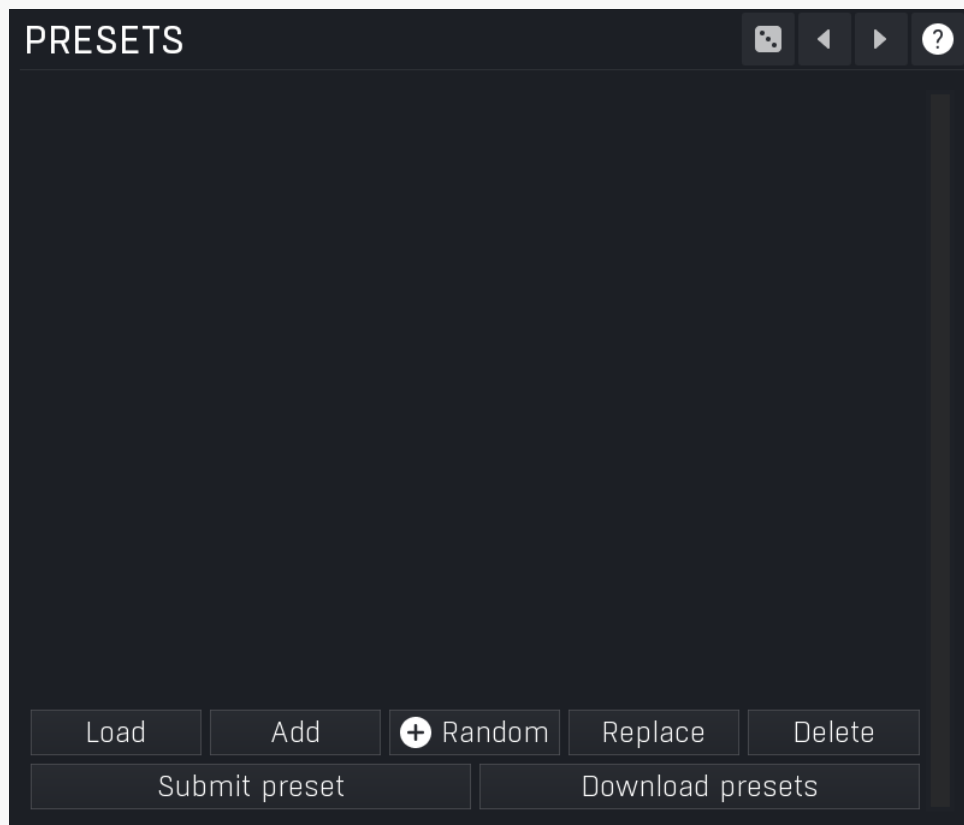
Import all button lets you import all files from the specified directory and add them to the selected folder.

Authors

### Authors

Authors displays a report of the authors creating the presets.

# Presets list



Presets list contains all presets available in the selected folder. **Double-click** on a preset or use **Load** button to load a preset. Use the buttons at the bottom of the list to perform additional changes. Please note that these are not actual files & folders on disk, but are records in the preset database.



## Random

Random button selects and loads a random preset from the current folder. This way you can quickly browse the presets in the folder in a completely random order.



## Previous

Previous button selects and loads the previous preset from the current folder.



## Next

Next button selects and loads the next preset from the current folder.

Submit preset

## Submit preset

Submit preset button submits the selected preset to the online exchange servers and retrieves all the presets currently in the database. This feature serves as an online database of presets available for all the user community. Please do not submit garbage presets.

Download presets

## Download presets

Download presets button retrieves all the presets currently in the database. This feature serves as an online database of presets available for all the user community. Please consider participating by submitting your presets as well.

Load

## Load

Load button loads the specified preset. Please note that you can do the same thing by double-clicking the preset itself or pressing the Enter key.

Add

## Add

Add button creates a new preset using the current settings.



Random

## Add

Add button saves a new preset with a random name.

Replace

## Replace

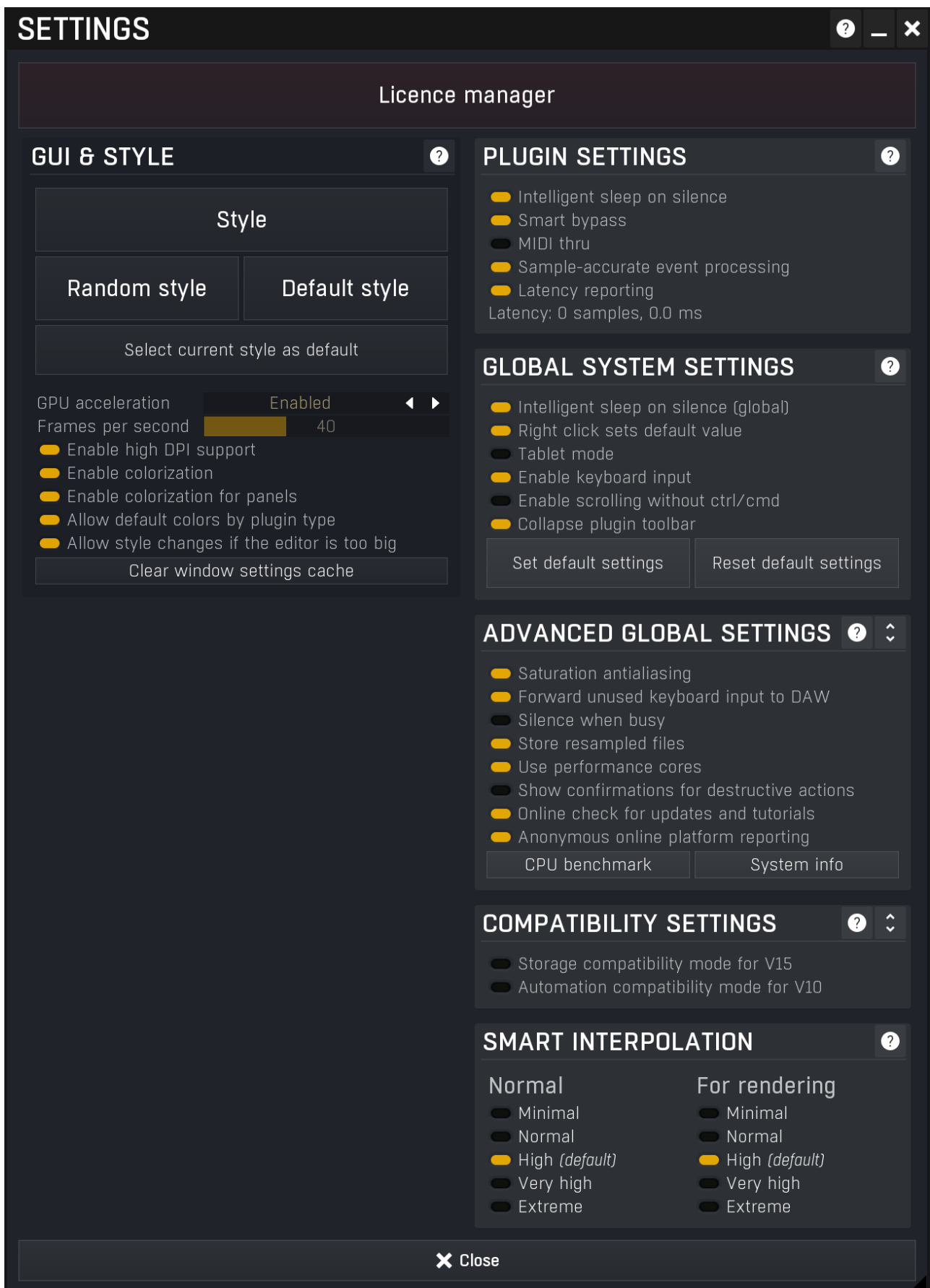
Replace button replaces the selected preset by one with current settings.

Delete

**Delete**

Delete button deletes the selected preset.

# Plugin settings



Plugin settings window offers more advanced settings and is available via the Settings button.

# Licence panel

Licence manager

Licence panel lets you manage licences on this computer.

Licence manager

## Activate

Activate button lets you activate your licence for the plugin on this computer.

# GUI & Style panel



GUI & Style panel lets you configure the plugin's style (and potentially styles of other plugins) and other GUI properties.

Style

**Style**

Style button lets you change the style for this particular plugin.

Random style

**Random style**

Random style button selects a random style with random editor mode.

Default style

**Default style**

Default style button reverts to the default style and default size of the GUI. Hold the Ctrl key while clicking to revert all MeldaProduction software products, not just the current plugin.

## Select current style as default

## Select current style as default

Select current style as default button stores the current style as the default for all MeldaProduction software. This is used for the other plugins that are currently using the default style; that is, those plugins for which you have NOT selected a specific style. Please note that if you have already selected a specific style for a particular plugin, then it won't be changed until you use the **Default style button**.

To set a default style for all MeldaProduction plugins, follow these steps:

1. Open any MeldaProduction plugin, select a style you prefer. You can also customize it to suit your needs. Then, click the **Select Current Style as Default button**.
2. While holding the Ctrl/Cmd key, click the **Default Style button**. This action will delete the style settings in all MeldaProduction plugins. All plugins will adopt your new default style upon startup.

Note: Step 2 is not necessary, unless you set some other default style from each plugin. Step 2 operation is destructive, as it removes all custom style settings from all plugins, so proceed with caution!

## GPU acceleration Enabled GPU acceleration

GPU acceleration controls how much the GPU is used for visual rendering to save CPU power.

**Enabled mode** provides maximum speed and lets the GPU perform as many drawing operations as possible.

**Compatibility mode** uses the GPU for drawing, but doesn't use modern technologies for maximum performance. Use it if you experience occasional problems with drawing, the usual case for older ATI graphics cards. With Pro Tools on OSX this mode is always used instead of Enabled mode due to compatibility problems with this host.

**Disabled mode** disables GPU acceleration completely, drawing is then performed by the CPU. Use only if you experience technical difficulties.

A known problem may occur when using multiple displays with multiple graphical interfaces. When moving the plugin window from one display to another, it may stop displaying correctly until you move it back to the original display.

## Frames per second 40 Frames per second

Frames per second controls the refresh rate of the visual engine. The higher the number is the smoother everything is, but the more CPU it requires. You might want to lower this value if your computer is running out of CPU power.

## ☒ Enable high DPI support **Enable high DPI / retina support**

Enable high DPI / retina support enables the plugin to use the high resolution on high DPI (Windows) and retina (OSX) devices. It is enabled by default and detected automatically, if the host allows it. If you run into any problems, you can disable it using this option. It may be desired if you use multiple displays where only some of them feature the high resolution making the image on the low resolution ones look ugly.

If you disable this option, on Windows the high DPI device detection will be ignored and the plugin will probably appear very small. You can manually compensate for it by using a bigger style. On OSX disabling this option will disable the high DPI rendering, resulting in the classic blurry look of non-compliant applications. Changes take effect after you restart the host.

## ☒ Enable colorization **Enable colorization**

Enable colorization enables the plugin to change the colors of certain elements overriding your style settings. Plugins use that to highlight different parts of the graphics interface for easier workflow. You may want to disable it if you just feel it's not for you. This particular option is relevant only for controls - knobs, sliders, checkboxes etc.

## ☒ Enable colorization for panels **Enable colorization for panels**

Enable colorization for panels enables the plugin to change the colors of certain elements overriding your style settings. Plugins use that to highlight different parts of the graphics interface for easier workflow. You may want to disable it if you just feel it's not for you. This particular option is relevant only for containers - panels, graphs etc.

## ☒ Allow default colors by plugin type **Allow default colors by plugin type**

Allow default colors by plugin type is on by default and makes the plugin select its default colors depending on the type of the Plugin. Hence for instance equalizer will always be green. This is done by selecting one of the first 8 color presets for the current style, so the actual colors depend on selected style and its presets. You may want to disable this if you for example want all plugins to look the same including the style and colors. It is necessary to restart your host for a change to this option to take effect.

## ☒ Allow style changes if the editor is too big **Allow style changes if the editor is too big**

Allow style changes if the editor is too big is on by default and makes the plugin change its style, editor mode and other settings if it finds out it is too big to fit the current screen resolution.

## Clear window settings cache

## Clear window settings cache

Clear window settings cache button deletes stored states of all popup windows on all MeldaProduction software. The window settings mostly contain positions and sizes, but in some cases also the data inside the popup windows. You can use this feature if something goes wrong, a window doesn't appear at all, problems like that. While this shouldn't happen and it's generally better to contract our support, this button provides a potential quick fix.

# Plugin settings panel

## PLUGIN SETTINGS



- ☒ Intelligent sleep on silence
  - ☒ Smart bypass
  - ☐ MIDI thru
  - ☒ Sample-accurate event processing
  - ☒ Latency reporting
- Latency: 0 samples, 0.0 ms

Plugin settings panel contains settings that control the behaviour of this plugin instance. These are properties that rarely need to be changed, so they have been moved here.

### ☒ Intelligent sleep on silence

#### Intelligent sleep on silence

Intelligent sleep on silence option provides a huge CPU saver by automatically disabling the plugin processing if the input is silent and if the plugin doesn't generate some signal on its own. This makes the plugins take virtually no CPU if there is no need for them to actually process anything. Disable this if you run into any problems with them.

### ☒ Smart bypass

#### Smart bypass

Smart bypass enables the high quality crossfading bypass system, which ensures a smooth transition between the processed and dry signals. You may want to disable it if you are using settings with latency on a plugin, which demands lots of CPU power, which would otherwise need to perform processing even when bypassed, which is pretty much the only downside of the smart bypassing algorithm.

### ☐ MIDI thru

#### MIDI thru

MIDI thru makes the plugin pass all input MIDI through to its MIDI output. That is often advantageous in DAWs such as Reaper, which naturally pass MIDI from one plugin to the next.

### ☒ Sample-accurate event processing

#### Sample-accurate event processing

Sample-accurate event processing makes the plugin schedule every event such as MIDI or automation to their accurate locations with sample accuracy, if the host allows it.

For example, if the block size in your host's audio settings is 1024 samples, this means the plugin is probably processing blocks of 1024 samples, in 44100 Hz sampling rate it is about 23ms. If this setting is disabled, any change in automation, MIDI, modulation etc. may then be granularized to 23ms (once per block), which means that you will not be able to recognize events that occur say 10ms apart from each other. When this setting is enabled however, the plugin divides processing blocks to sub-blocks and processes the events at their correct positions. This may, of course, require more CPU power.

### ☒ Latency reporting

#### Latency reporting

Latency reporting makes the plugin report latency to the DAW, if any. Normally this is enabled, but in certain live situations you may want to disable this, so that the DAW stops compensating the latency on other tracks. It has no effect if the plugin is placed on master track.

# Global system settings panel

## GLOBAL SYSTEM SETTINGS



- ☒ Intelligent sleep on silence (global)
- ☒ Right click sets default value
- ☐ Tablet mode
- ☒ Enable keyboard input
- ☐ Enable scrolling without ctrl/cmd
- ☒ Collapse plugin toolbar

Set default settings

Reset default settings

Global system settings panel contains settings which are applied to all plugins on this computer.

### ☒ Intelligent sleep on silence (global)

### Intelligent sleep on silence (global)

Intelligent sleep on silence (global) is a global switch, which disables the **Auto disable on silence** feature in all plugins on the system. It is provided "just in case" something goes wrong.

### ☒ Right click sets default value

### Right click sets default value

Right click sets default value makes the engine set default value to a parameter when you right click on it. By default, a menu is displayed instead, with an option to set the default value, but potentially with more features. When this is disabled, you can still set a default value by holding ctrl/cmd when right clicking the control.

### ☐ Tablet mode

### Tablet mode

Tablet mode enables better support for tablets at the expense of the mouse. Enable this if you are using a tablet to control the plugins and it is behaving incorrectly.

### ☒ Enable keyboard input

### Enable keyboard input

Enable keyboard input enables the keyboard input for the main plugin window. You may want to disable if the plugin intercepts spacebar key (often used by the host for playback enable/disable and your host doesn't allow for the problem itself).

### ☐ Enable scrolling without ctrl/cmd

### Enable scrolling without ctrl/cmd

Enable scrolling without ctrl/cmd allows you to scroll anywhere in scrollable fields using mouse wheel. By default this is off, so that you have to hold ctrl/cmd while using the mouse wheel. That protects you from accidentally changing parameters.

### ☒ Collapse plugin toolbar

### Collapse plugin toolbar

Collapse plugin toolbar makes all plugins collapse the plugin toolbar containing more advanced features such as channel modes, A-H presets, oversampling, safety limiter etc. It is enabled by default to make the user interfaces cleaner and easier to grasp for beginners.

Set default settings

### Set default settings

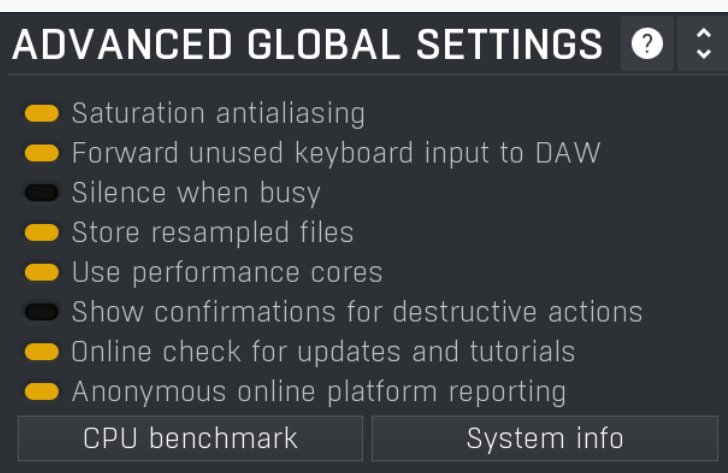
Set default settings button stores the current plugin settings as the defaults, so that when you open a new instance of the plugin, these settings will be loaded automatically.

Reset default settings

### Reset default settings

Reset default settings button removes the defaults that you set using **Set default settings** button, so that when you open a new instance of the plugin, the factory defaults will be loaded.

## Advanced global settings panel



Advanced global settings panel contains advanced settings which are applied to all plugins on this computer.

### ☒ Saturation antialiasing

### Saturation antialiasing

Saturation antialiasing enables a global support for antialiasing in saturation algorithms available in many of the plugins. These require additional CPU processing, however significantly reduce aliasing artifacts without a need for oversampling.

### ☒ Forward unused keyboard input to DAW

### Forward unused keyboard input to DAW

Forward unused keyboard input to DAW makes the plugin forward unused keyboard events to the DAW from its popups. If this is

disabled, pressing say spacebar commonly used to start/stop playback won't work if a popup window is active. Enabling this makes this work and it is optional just in case your DAW does something unexpected.

### ☐ Silence when busy

### Silence when busy

Silence when busy makes all plugins silence the output when something time consuming is being performed in background and the plugin needs to wait for it. For instance, in modular plugins such as MXXX, adding a module requires lots of changes in the entire engine, so it is performed in background and while the plugin is inconsistent state, it is temporarily bypassed. Sometimes however, when performing live, bypassing makes the dry signal go through and that may not be wanted. So you can enable this option, and the plugin will silence the output instead.

### ☐ Store resampled files

### Store resampled files

Store resampled files allows the plugins create audio files for sampling rates being used if they differ from the original file sampling rate. It is used only by a few plugins, but it can improve the loading performance a lot at the cost of some additional storage on the hard drive. Disable this option if you are short on free space.

### ☐ Use performance cores

### Use performance cores

Use performance cores instructs the plugin to use performance cores for audio processing. On systems with both efficiency and performance cores, this provides more efficient CPU utilization. Disabling this option may help when running modern operating systems on legacy hardware.

Note: Changing this option requires restarting the DAW!

### ☐ Show confirmations for destructive actions

### Show confirmations for destructive actions

Show confirmations for destructive actions makes the plugin display a confirmation window whenever you are going to change the plugin settings irreversibly when using a feature, for example: when resetting your settings.

### ☐ Online check for updates and tutorials

### Online check for updates and tutorials

Online check for updates and tutorials lets the plugin ask about once a week if there is a new version or tutorial available so you can be easily kept up to date.

### ☐ Anonymous online platform reporting

### Anonymous online platform reporting

Anonymous online platform reporting helps us maximize compatibility with your operating system and host. If enabled, our plugins will send information about the system and host that you are using. We can use this information to find out which plugins and platforms are used the most and maximize testing and support there. Platform reporting is completely anonymous and requires only minimal internet connection time (a few kB once a week).

### CPU benchmark

### CPU benchmark

CPU benchmark button calculates the performance of the plugin with the current settings.

### System info

### System info

System info button displays some technical information about the build and the machine.

## Compatibility settings panel

### COMPATIBILITY SETTINGS



☐ Storage compatibility mode for V15

☐ Automation compatibility mode for V10

Compatibility settings panel contains advanced settings you rarely need unless you run into some problems when using multiple versions or old projects.

### ☐ Storage compatibility mode for V15

### Storage compatibility mode for V15

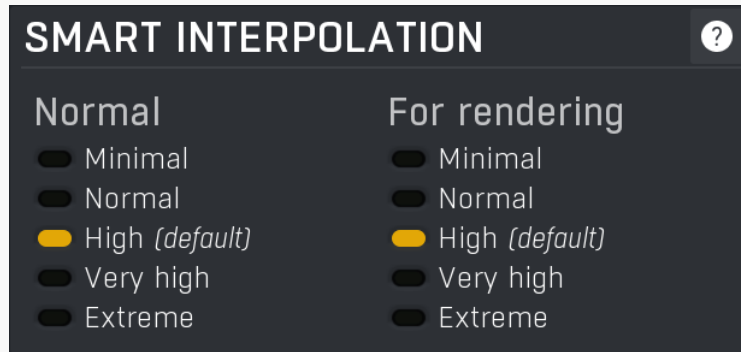
Storage compatibility mode for V15 reverts to the older and much slower storage system used by version 15 and older. Use this if you want to open your projects or presets on older version of MeldaProduction plugins.

### ☐ Automation compatibility mode for V10

### Automation compatibility mode for V10

Automation compatibility mode for V10 reverts the set of automation parameters back to version 10 and earlier. Use this if you need the plugins to work with projects, which contain automation, made using version 10 or older. In version 11 the list of automatable parameters have been highly simplified and reorganized and multiparameters are provided for the vast number of hidden parameters. This should speed up loading, improve workflow with the plugins and improve compatibility with various hosts.

# Smart interpolation panel



Smart interpolation panel controls the depth of the smart interpolation algorithm, which controls the parameters in order to provide maximum audio quality and lower the chance of zipper noise. Smart interpolation is engaged whenever you change any parameter via the GUI, modulators, multiparameters, MIDI or automation.

Many parameters can be automated easily and the plugin responds with sample-accurate results. However, several parameters need exhaustive pre-processing when changed. In these cases, the parameters are not updated every sample, but, for example, once every 32 samples. This highly reduces CPU usage, but affects the output quality.

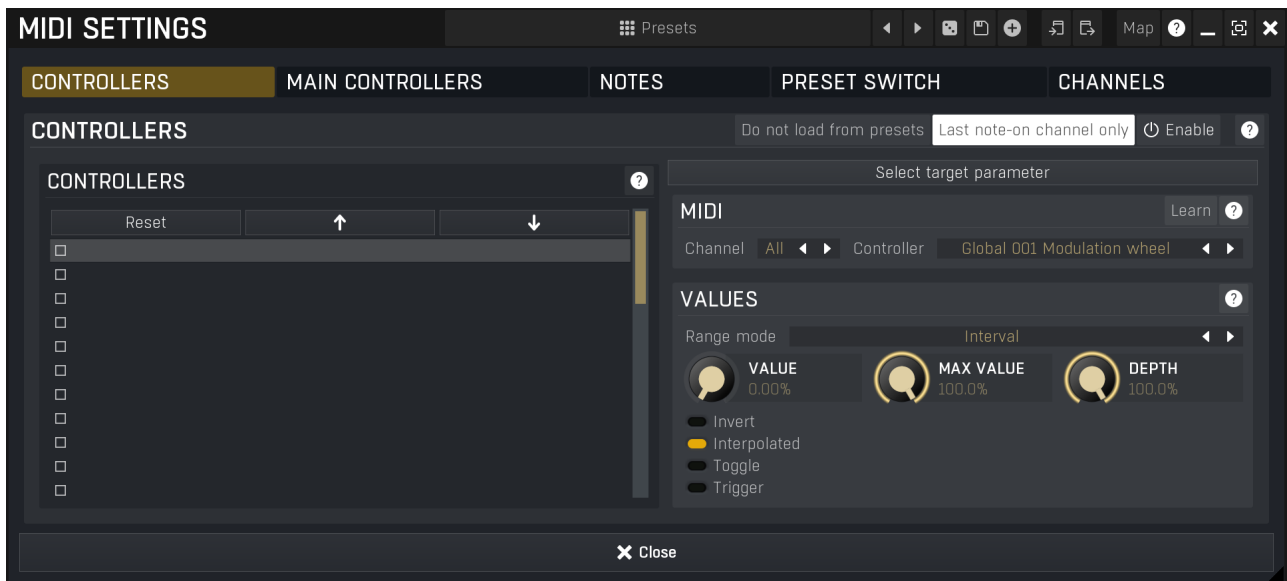
With modulators the situation is more complicated. Besides the updating issue, the modulator itself can perform some pretty advanced processing, hence it is better to perform the processing in blocks. However, the bigger the block, the less often the modulator updates those parameters associated with it and the resulting modulation is less accurate. In a way you can say that the modulator is slower and lazier. This may actually be wanted, so when it comes to modulators it is not true that a better mode always means better output quality.

The smart interpolation mode controls the maximum number of samples being processed before the parameters are updated. **Minimal mode** uses 2048 samples and rarely will do anything unless processing offline. **Normal mode** uses 256 samples and usually is enough to achieve good quality results. **High mode** uses 32 samples and provides perfect quality for most cases. It is also a good compromise between CPU usage and audio quality, so it is the default. **Very high mode** uses 4 samples and you will rarely need it. **Extreme mode** uses 1 sample, which means that everything is updated after every single sample. This provides the highest possible accuracy and quality you can ever achieve, however it requires lots of CPU and it is very unlikely that you will ever need it. If you use this mode and still hear audio artifacts, then either what you are hearing is actually CPU overload, or you are doing something that is not physically possible.

The higher the mode, the quicker the parameter updates, but the more the CPU load.

*Please note that modulating certain parameters without artifacts is impossible. For example, when modulating a delay very quickly, the physics of such a process just cannot occur in the natural world and the results are appropriately unnatural. These physically impossible processes usually manifest themselves as distortion or zipper noise.*

# MIDI editor



MIDI settings window lets you configure, how the plugin reacts to various MIDI messages. You can use MIDI controllers or MIDI notes and you can also configure a controller to switch between presets, which is especially useful for realtime performances.

Presets

## Presets

Presets button displays a window where you can load and manage available presets. Hold **Ctrl** when clicking to load a random preset instead.



### Left arrow

Left arrow button loads the previous preset.



### Right arrow

Right arrow button loads the next preset.



### Randomize

Randomize button loads a random preset.



### Save

Save button replaces the current preset.



### Copy

Copy button copies the settings onto the system clipboard.



### Paste

Paste button loads the settings from the system clipboard.



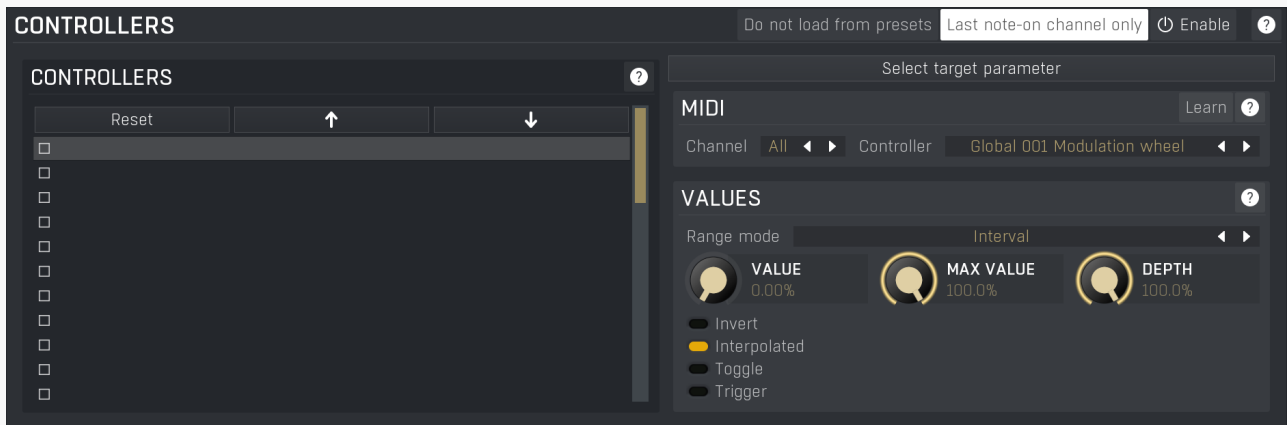
### Map

Map button displays all current mappings of modulators, multiparameters and MIDI (whichever subsystems the plugin provides).

**CONTROLLERS** MAIN CONTROLLERS NOTES PRESET SWITCH CHANNELS **Tab selector**

Tab selector switches between subsections.

# Controllers panel



Controllers panel contains settings of MIDI controllers.

Do not load from presets

## Do not load from presets

Do not load from presets button disables loading the controllers from presets. This may be handy if you have configured specific MIDI controllers with target parameters and you want to browse the presets without the need to configure them every time. Please note that some presets may rely on specific controllers though. For example, if a preset requires a velocity controller to provide velocity-dependent response, this option will avoid loading it, so the preset won't be complete, until you reconfigure it.

Last note-on channel only

## Last note-on channel only

Last note-on channel only button makes the engine more suitable for voice-per-channel devices. These devices are able to send different controllers for each note you press, which however means that these could collide. This option makes the engine pass only the controllers that are related to the last note you pressed. For classic keyboards it is not relevant as you will usually use a single MIDI channel to transmit both the controllers and notes. Some more modern keyboard controllers will allow you to select one MIDI channel for the notes and a different one (or the same one) for the controllers.

## Controllers



Reset

## Reset

Reset button resets the selected controller to undefined state.



## Up

Up button moves the selected controller up one item, if possible. This may be useful when keeping things organized, but please note that if you have some multiparameter, modulator or another subsystem access the ranges of individual controllers, this function will reorder them, so these connections will no longer be correct.



## Down

Down button moves the selected controller down one item, if possible. This may be useful when keeping things organized, but please note that if you have some multiparameter, modulator or another subsystem access the ranges of individual controllers, this function will reorder them, so these connections will no longer be correct.

## Select target parameter

## ParameterIndex

ParameterIndex button lets you choose the parameter being controlled. The set contains all automatable parameters.

## MIDI

### MIDI

[Learn](#)

Channel

All



Controller

Global 001 Modulation wheel

[Learn](#)

### Learn

Learn enables or disables MIDI learn. When enabled, the plugin listens to both the MIDI CC messages from the controllers that you touch and the target parameters that you touch and associates the last-touched of each with the selected slot. You can perform several mappings by selecting another slot, adjusting a hardware controller. Then adjusting a target parameter, and repeating those steps for each mapping desired.

Channel

All



### Channel

Channel defines the controller MIDI channel.

Controller

Global 001 Modulation wheel



### Controller

Controller defines the source controller.

## Values

### VALUES



Range mode

Interval



VALUE

0.00%



MAX VALUE

100.0%



DEPTH

100.0%

☐ Invert☒ Interpolated☐ Toggle☐ Trigger

Range mode

Interval



### Range mode

Range mode defines how the parameter range is selected. While sometimes it is better to specify minimum and maximum, other times it is better to use a nominal center and depth (% of full scale). This control allows you to define which one it will be.

**Up and down** mode makes the values go above and below the selected **Value**, which is considered the center. The interval is made smaller if necessary.

**Full range mode** is similar, except the range is symmetrically constrained, so the selected **Value** may not be the center anymore.

**Up/down only modes** goes from the selected value up/down only.

Let's compare these 4 modes. Taking a value of -12dB value, with a depth of 75% and a scale of +/- 24dB. The nominal range is therefore = +/- 24 dB \* 75% = 36dB. With values of 0%, 50% and 100% the outputs are:

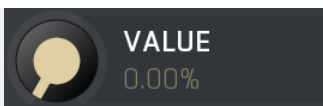
Up and down: -24, -12, 0 (range constrained to 12 dB either side)

Full range: -24, -6, 12 (range limited to minimum, but not constrained)

Up only: -12, 6, 24 (range not constrained = +/- 24 dB \* 75% = 36dB)

Down only: -12, -18, -24 (range limited to minimum)

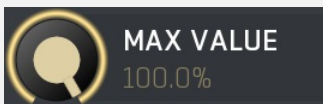
**Interval mode** is the most simple one and goes from **Value** to **Maximal value**.



VALUE  
0.00%

### Value

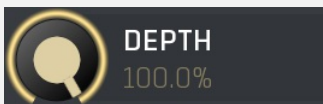
Value defines the center of the target parameter's range or the minimum if the **Range mode** is set to **Interval**.



MAX VALUE  
100.0%

### Maximal value

Maximal value defines the upper limit of the target parameter's range. It is available only if the **Range mode** is set to **Interval**. This value can be lower than **Value**. 0% is always mapped to reference>Value and 100% to reference>Maximal value.



DEPTH  
100.0%

### Depth

Depth defines size of the target parameter's range. It is used only if the **Range mode** is not set to **Interval**.



Invert

### Invert

Invert checkbox inverts the controller shape, so the minimum becomes the maximum etc.



Interpolated

### Interpolated

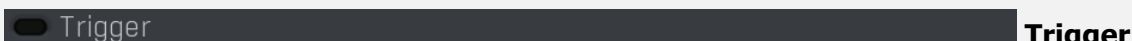
Interpolated makes the controller value interpolated over the time using the smart interpolation. This approach ensures there won't be abrupt changes, which could lead to clicks and pops. However sometimes you may want to apply these changes immediately - for example when changing ADSR based on the note velocity, in which case this parameter should be disabled.



Toggle

### Toggle

Toggle mode makes the controller switch between the maximum and minimum of the target parameter whenever triggered. By default triggering it means going from values below 50% to above 50%. By enabling **Trigger** you can make it perform the trigger everytime the value is changed.



Trigger

### Trigger

Trigger mode makes the controller automatically produce maximum and the minimum right after it. It can be handy with some buggy MIDI controllers providing buttons, which however do not send value 0, and only repeat value 127. Trigger makes it behave like the minimum was actually sent by the MIDI controller a little bit after the original message.

## Main controllers panel

MAIN CONTROLLERS				Presets			
1	Global 001 Modulation wheel	◀ ▶	Learn	9	Off	◀ ▶	Learn
2	Global 002 Breath controller	◀ ▶	Learn	10	Off	◀ ▶	Learn
3	Global 011 Expression	◀ ▶	Learn	11	Off	◀ ▶	Learn
4	Off	◀ ▶	Learn	12	Off	◀ ▶	Learn
5	Off	◀ ▶	Learn	13	Off	◀ ▶	Learn
6	Off	◀ ▶	Learn	14	Off	◀ ▶	Learn
7	Off	◀ ▶	Learn	15	Off	◀ ▶	Learn
8	Off	◀ ▶	Learn	16	Off	◀ ▶	Learn

Main controllers panel lets you define the set of main MIDI controllers on your MIDI device. These are not stored with the presets, so using them lets you easily switch between MIDI controllers, create presets that will work for users of other MIDI controllers etc. Using the Main controllers is no different than using the standard MIDI controllers, but the extra 'layer' can make things simple when using multiple controllers and also in general situations where your MIDI device has several controllers with quite 'random' numbers.

Presets

### Presets

Presets button displays a window where you can load and manage available presets. Hold **Ctrl** when clicking to load a random preset instead.



Left arrow

Left arrow button loads the previous preset.



### Right arrow

Right arrow button loads the next preset.



### Randomize

Randomize button loads a random preset.



### Save

Save button replaces the current preset.

Global 001 Modulation wheel



### Controller

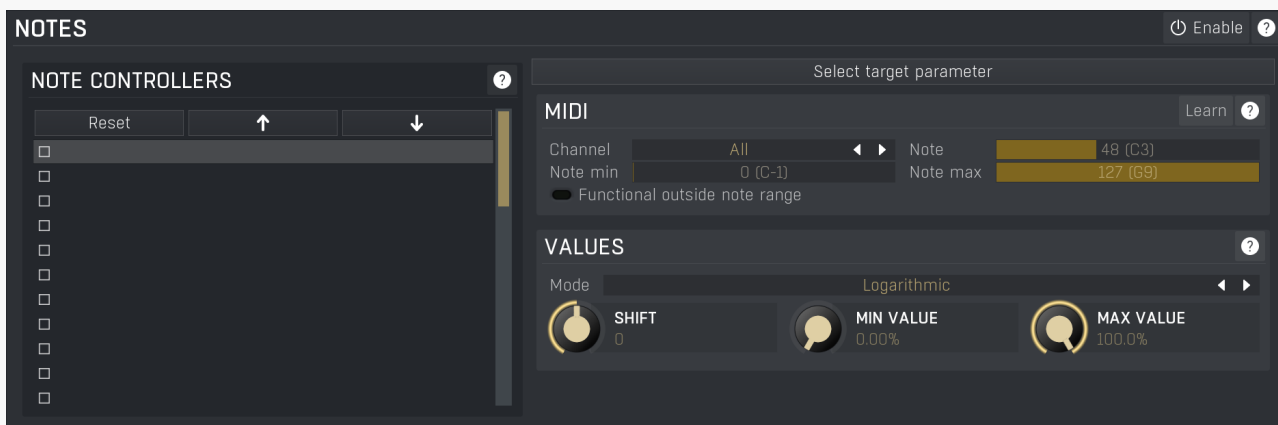
Controller defines the MIDI controller associated to this Main controller.

Learn

### Learn

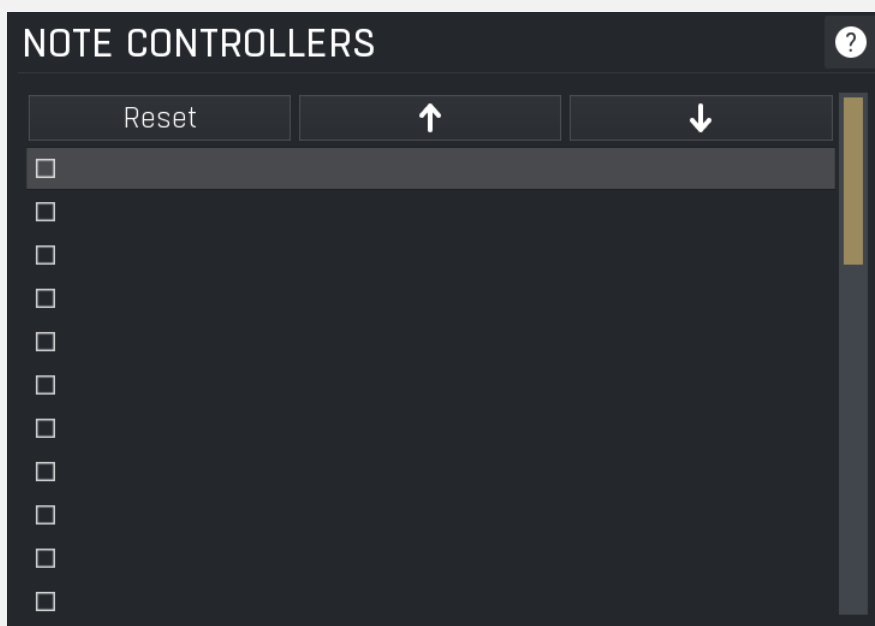
Learn enables or disables MIDI learn. When enabled, the plugin listens to the controllers you touch and associates them to the main controller.

## Notes panel



Notes panel contains settings of MIDI note controllers, if you want to control parameters using MIDI keys.

## Note controllers



Reset

Reset

Reset button resets the selected controller to undefined state.



### Up

Up button moves the selected controller up one item, if possible. This may be useful when keeping things organized, but please note that if you have some multiparameter, modulator or another subsystem access the ranges of individual controllers, this function will reorder them, so these connections will no longer be correct.



### Down

Down button moves the selected controller down one item, if possible. This may be useful when keeping things organized, but please note that if you have some multiparameter, modulator or another subsystem access the ranges of individual controllers, this function will reorder them, so these connections will no longer be correct.

Select target parameter

## Learn

Learn enables or disables MIDI learn. When enabled, the plugin listens to both the notes you touch and the parameters you touch and associates them with the selected slot.

## MIDI

### MIDI

Learn



Channel

All



Note

48 [C3]

Note min

0 [C-1]

Note max

127 [G9]

☐ Functional outside note range

Channel

All



### Channel

Channel defines the controller MIDI channel.

Note

48 [C3]

### Note

Note defines the controller's target MIDI note. It is used only in On/off and Switch modes, which you can set using **Mode** parameter (in the **Values** panel).

Note min

0 [C-1]

### Note min

Note min controls the lowest note to be used by a controller in Linear or Logarithmic mode. The minimum value of the target parameter will then be associated to this note.

If both Note min and Note max parameters are default, the plugin takes the actual frequency of each note, and transforms it into the range 20Hz to 20kHz, which is the range used by all equalizers and filters, so that you can literally play a parameter on a MIDI keyboard. If you change either of these 2 parameters however, the plugin takes the range of notes as the requested interval. This is useful for example if you have a small MIDI keyboard used for soloing and you want increase some parameter the higher you play. In the default mode it would be difficult, since the range of frequencies is much bigger than the range of your MIDI keyboard. *Set the **Note min** and **Note max** to C0 and B0 respectively, the **Mode** to Logarithmic and select a suitable target parameter (Dry/Wet is fine). Send MIDI notes in the specified range to the plugin and you will see the target parameter increase (by 9.09% (= 100 / (12-1)) for a 100% range).*

Note max

127 [G9]

### Functional outside note range

Functional outside note range makes the note controller work even if the note isn't in the specified range, clamping the value to the minimum or maximum.

## Values

### VALUES



Mode

Logarithmic



SHIFT  
0



MIN VALUE  
0.00%



MAX VALUE  
100.0%

Mode

Logarithmic



### Mode

Mode controls how the controller works.

**Key** takes the note index and transforms it into 0..1, which is the output of any controller. This mode is useful for scale switches for example - if you want to use MIDI keys to change values linearly.

**Key (in octave)** is similar but it has only 12 values - one per each key and it doesn't matter which octave you press it in.

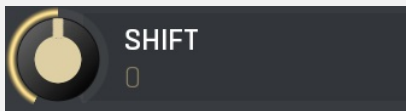
**Linear** converts the notes into frequencies and then transform them into the linear scale from 20Hz to 20kHz.

**Logarithmic** converts the notes into the frequencies and then into the logarithmic scale from  $\log(20)$  to  $\log(20000)$ . A typical use case is when you want to control an equalizer band using a MIDI keyboard. Since EQ frequencies work in logarithmic scale, this mode makes both things compatible and the EQ frequency will be set to the note frequency.

**On/off** modes react only to single notes and can be used for triggers. When the Note On is received the parameter is changed to its **Max value** and when the Note Off is received the parameter is changed to its **Min value**. So this mode can also be used to change between any 2 parameter values.

**Switch** modes are similar, but only recognize when a note is pressed. The Note Offs are ignored. Note Ons select the **Max value** and **Min value** alternately. In all octaves mode it doesn't matter which octave is used. For example, this is useful when you want to use any note C to switch something on and off.

**Velocity** modes do not actually follow the note number being pressed, but it's velocity instead. While you can do the same thing with normal MIDI controllers using the special Velocity controllers, this one allows you to select only some notes to follow.



SHIFT

0

### Shift

Shift lets you shift the original note up or down by the specified number of semitones.

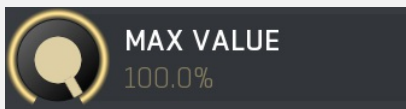


MIN VALUE

0.00%

### Min value

Min value defines the minimum value for the target parameter.



MAX VALUE

100.0%

### Max value

Max value defines the maximum value for the target parameter.

Enable MIDI program change

Enable

## MIDI program change

Enable MIDI program change enables processing program change MIDI message.

## Preset previous/next trigger panel

PRESET PREVIOUS/NEXT TRIGGER

Learn ☐ Enable ?

Channel

All

Controller

Global 000 Bank select



Preset previous/next trigger panel lets you select a MIDI controller, which will switch presets. It provides the same action as clicking the arrows next to the main preset button. When the controller value gets below 33%, the previous preset is loaded. When the controller value gets above 66%, the next preset is loaded.

Learn

### Learn

Learn enables or disables MIDI learn.

Channel

All



### Channel

Channel defines the controller MIDI channel.

Controller

Global 000 Bank select




### Controller

Controller defines the source controller.

## Simulate program change via controller panel

## SIMULATE PROGRAM CHANGE VIA CONTROLLER

Learn ☐ Enable 

Channel  
Controller Global 000 Bank select  
Number of values 128

Simulate program change via controller panel lets you select a MIDI controller, that will work as program change, for convenience. You can use it then to switch between A-H presets or presets via panel below.

Learn

### Learn

Learn enables or disables MIDI learn.

Channel All

### Channel

Channel defines the controller MIDI channel.

Controller Global 000 Bank select

### Controller

Controller defines the source controller.

Number of values 128

### Number of values

Number of values defines the number of programs to switch between. By default Program change MIDI standard offers 128 programs. However it may be too many and could be hard to actually control with the specific controller. Hence you can lower the number of actual programs.

## Program change in presets panel

### PROGRAM CHANGE IN PRESETS

☐ Enable 

Folder PROGRAMS  
Channel All

Program change in presets panel enables the MIDI program change processing. If disabled, the plugin follows Program Change messages by changing the A-H presets. The obvious disadvantage is that this way there are just 8 presets. By enabling this feature the plugin stops selecting A-H presets and rather loads different presets from the specified preset folder, including all sub-folders. The default folder is called "Programs". To use it, you simply need to create a preset folder called Programs and put the presets into it. Note that the order matters of course. And you can change the folder name at any time, so you can have several sets of selectable presets.

Folder PROGRAMS

### Folder

Folder defines the preset folder from which the presets for program-change MIDI messages are taken.

Channel All

### Channel

Channel defines the program change MIDI channel.

☐ Ignore pitch-bend range message

Ignore

### pitch-bend range message

Ignore pitch-bend range message allows one to ignore the MIDI Registered Parameter message communicating the pitch-bend range and to keep the value set by the **Pitch-bend range** control.

☐ Ignore MPE Configure message

Ignore

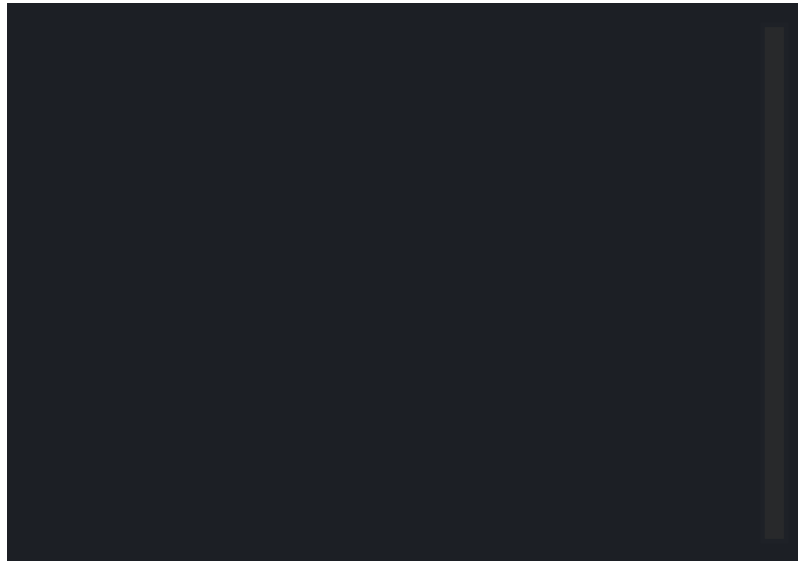
### MPE Configure message

Ignore MPE Configure message toggles whether the plugin should respond to the MPEConfigure message, or should just rely on the configuration provided in the **MPE** panel.

# Used controls

Here we discuss the general properties of all application controls. As a most important rule you should note, that you can always use any question mark button or F1 (or Ctrl+F1 or Ctrl+H) key with the mouse cursor over a specified control to get detailed information about what it does and how to use it.

## Listbox



- **Left mouse button** selects an item. If you click on a check-box, the item will be checked/unchecked.
- **Mouse-wheel** scrolls the view.
- **Arrow keys, Page Up** and **Page Down** move the selection.
- **Space** checks or unchecks the selected item(s).
- **Home** key selects the first item, **End** selects the last one.

## Tree-control



- **Left mouse button** selects an item. If you click on a check-box, the item will be checked/unchecked.
- **Mouse-wheel, Up** and **Down** arrow keys, **Page Up** and **Page Down** move the selection.
- **Enter** opens/closes the selected item.
- **Space** checks or unchecks the selected item.
- **Home** key selects the topmost item, **End** selects the last one.

## Value button

Analytical smoothing

Off

Value button is an alternative to the knobs and its main advantage is that it is very small. In some cases the button simply serves as a clickable item and a menu is shown when clicked. However the mouse wheel and other controls still do work.

- **Click and drag using the left mouse button** to change the value.
- **Right mouse button** shows a menu with additional options. Hold **ctrl/cmd** to select the default value.
- **Mouse wheel**, **arrow keys** and vertical drag using **middle mouse button** or using **left mouse button while holding Ctrl** modifies the value more precisely.
- **Home key** configures the minimal possible value, conversely **end key** setups the maximal one.
- **Esc or Backspace keys** restore the original value when either one is pressed during dragging.
- **Shift + left mouse button** or **double-click using left mouse button** lets you edit the value as text. You can use the virtual keyboard or type on your computer keyboard. In some cases this shows a menu with all possible values instead.
- **Alt + press then release** measures the time between the press and the release and applies it as time/frequency tap. Usable only for certain values of course.

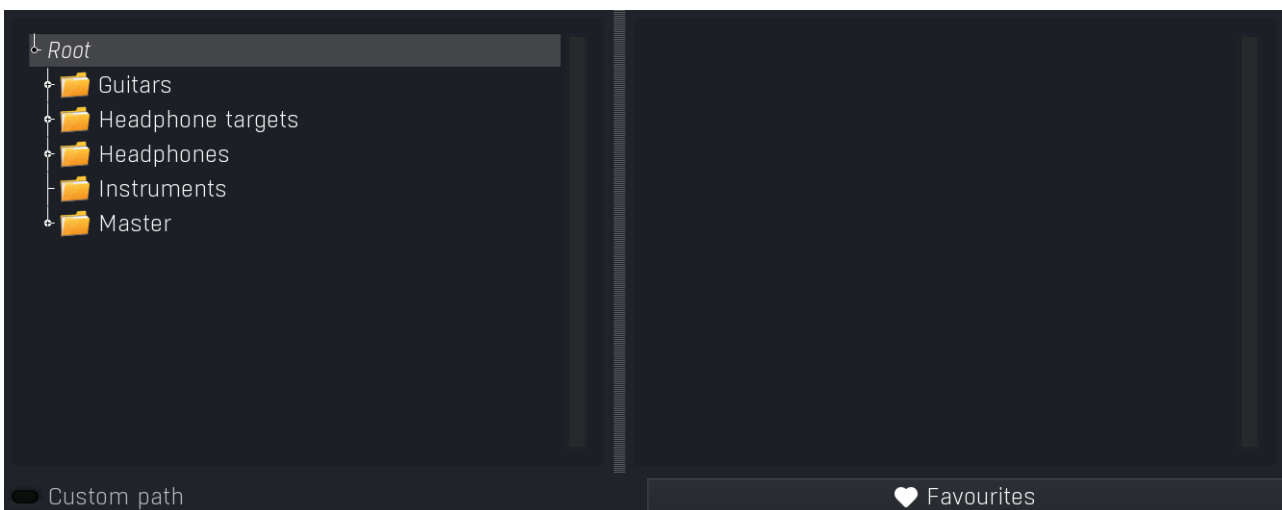
## Zoomer



Zoomer provides a simple way to zoom and move in an enlargeable view.

- **Plus button** zooms-in.
- **Minus button** zooms-out.
- **Zoom default button** zooms to the default ratio, which typically means full zoom-out.
- **Lock button** locks the zoom ratio.

## File selector



File selector contains a directory tree that you use to move across the file system. In many cases the range is limited to a sub-tree to maintain better organisation. Next to the tree you can see the list of files present in the selected directory. There is a splitter between both of them that you can use to change the width of both of the lists.

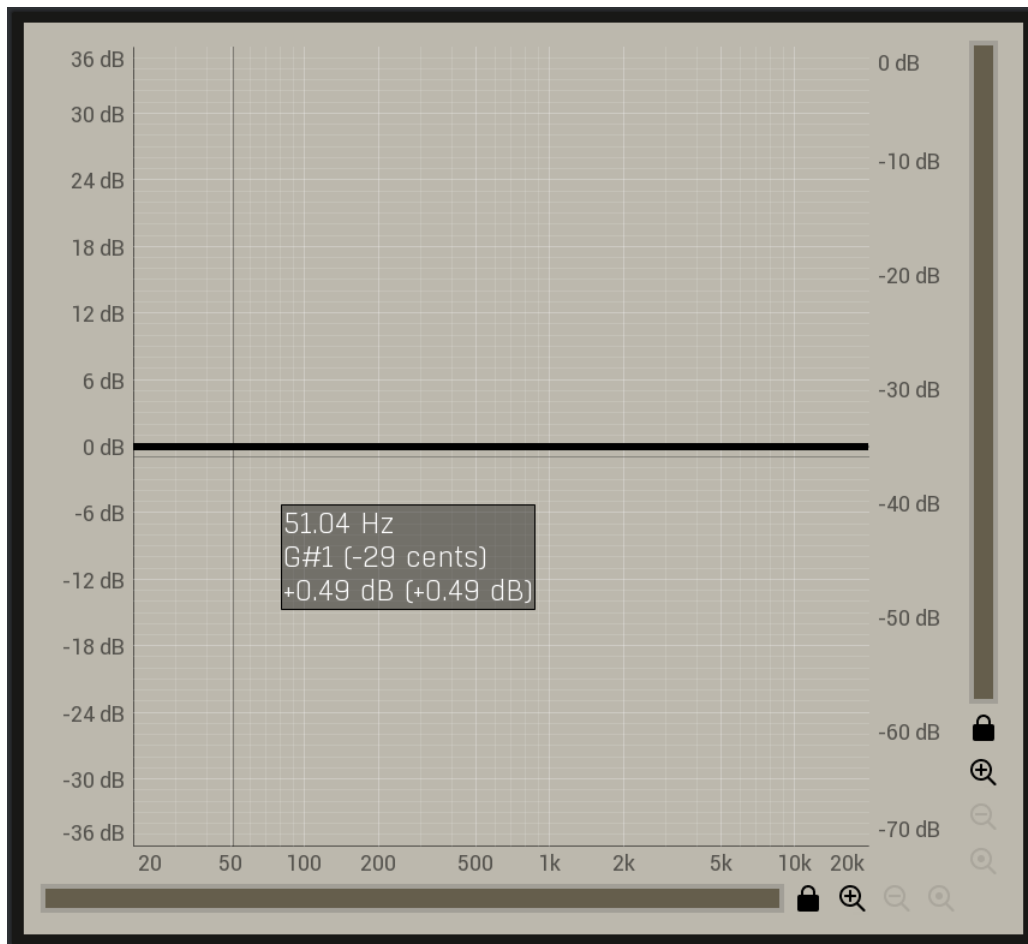
## Knob



Knob simulates physical knobs used to edit various values.

- **Click and drag using the left mouse button** to change the value.
- **Right mouse button** shows a menu with additional options. Hold **ctrl/cmd** to select the default value.
- **Mouse wheel**, **arrow keys** and vertical drag using **middle mouse button** or using **left mouse button while holding Ctrl** modifies the value more precisely.
- **Home key** configures the minimal possible value, conversely **end key** setups the maximal one.
- **Esc or Backspace keys** restore the original value when either one is pressed during dragging.
- **Shift + left mouse button** or **double-click using left mouse button** lets you edit the value as text. You can use the virtual keyboard or type on your computer keyboard. In some cases this shows a menu with all possible values instead.
- **Alt + press then release** measures the time between the press and the release and applies it as time/frequency tap. Usable only for certain values of course.

## Graph editor



Graph editor will show and edit one or more graphs.

- **Zoomers** below and on the right control the zoom amount and position of the view.
- **Mouse wheel** zooms in or out. Hold **Shift** to move the view horizontally instead, without zooming. Hold **Ctrl** to move the view vertically instead, without zooming. Alternatively you can zoom in using **Alt + right button double click** and out using **Alt + left button double click**. You can also use keyboard **numbers 0 to 9** to quickly set the zoom level.
- **Drag a rectangle using the left mouse button while holding Alt** zooms into the selected rectangle if possible.
- **Drag using the left mouse button while holding Alt and Ctrl** to scroll the view. This is not possible when zoomed all the way out as there is nothing to scroll.

## Tab-set

### REFERENCE ANALYSES

### INPUT ANALYSES

Tab-set is typically used wherever there is too much to edit, but not enough space to display it all. It can be also used to switch between possible alternatives.

- **Left mouse button** selects a tab.
- **Ctrl + Left mouse button or Right mouse button** displays the whole tab in a pop-up window (this is not used for all sets of tabs). This comes handy when you want to have multiple tabs visible at the same time.
- **Left and Right arrows** select the neighbouring tab.
- Click on one of the buttons on the border to scroll the control and show tabs that are currently invisible.

# Installation, activation, introduction to audio plugins

## Installation

All MeldaProduction plugins are currently available for Windows and Mac OS X operating systems, both 32-bit and 64-bit versions. You can download all software directly from our website. Since the installation procedures for the two operating systems are quite different, we will cover each one separately.

The download files for the effects include all the effects plugins and MPowerSynth. During the installation process you can select which plugins or bundles to install. If you have not licensed all of the plugins in a bundle then you just need to activate each plugin separately.

If you have multiple user accounts on your computer, always install the software under your own account! If you install it under one account and run it under a different one, it may not have access to all the resources (presets for example) or may not even be able to start.

## Installation on Windows

All plugins are available for VST, VST3 and AAX interfaces. The installer automatically installs both the 32-bit and 64-bit versions of the plugins.

**Note: Always use 32-bit plugins in 32-bit hosts, or 64-bit plugins in 64-bit hosts. 64-bit plugins cannot work in 32-bit hosts even if the operating system is 64-bit. Conversely, never use 32-bit plugins in 64-bit hosts. Otherwise they would have to be 'bridged' and, in some hosts, can become highly unstable.**

You can select the destination VST plugins paths on your system. The installer will try to detect your path, however you should check that the correct path has been selected and change it if necessary. In all cases it is highly recommended to use the current standard paths to avoid any installation issues:

32-bit Windows:

C:\Program files\VstPlugins

64-bit Windows:

C:\Program files (x86)\VstPlugins *(for 32-bit plugins)*

C:\Program files\VstPlugins *(for 64-bit plugins)*

If your host provides both VST and VST3 interfaces, VST3 is usually preferable. If a plugin cannot be opened in your host, ensure the plugin file exists in your VST plugin path and that if your host is 32-bit, the plugin is also 32-bit, and vice versa. If you experience any issues, contact our support via [info@meldaproduction.com](mailto:info@meldaproduction.com)

## Installation on Mac OS X

All plugins are available for VST, VST3, AU and AAX interfaces. Installers create both 32-bit and 64-bit versions of the plugins.

If your host provides multiple plugin interface options, VST3 is usually preferable. If you experience any issues, contact our support via [info@meldaproduction.com](mailto:info@meldaproduction.com)

Most major hosts such as Cubase or Logic should work without problems. In some other hosts the keyboard input may be partly non-functional. In that case you need to use the virtual keyboard available for every text input field. You may also experience various minor graphical glitches, especially during resizing plugin windows. This unfortunately cannot be avoided since it is caused by disorder in Mac OS X.

## Uninstallation on Windows

The Uninstaller is available from the Start menu and Control panel, in the same way as for other applications. If you don't have any of these for any reason, go to Program files / MeldaProduction / MAudioPlugins and run setup.exe.

## Uninstallation on OSX

The Uninstaller is available from Applications / MeldaProduction / MAudioPlugins / setup.app.

## Deleting all data, presets etc.

Even if you uninstall the plugins, some data will be left behind - because of potential crossdependencies or because these are your presets, settings, configurations etc. If you want to wipe out everything, please manually delete following folders:

Windows:

C:\ProgramData\MeldaProduction

C:\Users\{username}\AppData\Roaming\MeldaProduction

OSX:

Macintosh HD/Library/Application support/MeldaProduction/  
HOME/Library/Application support/MeldaProduction

## Performance precautions

In order to maximize performance of your computer and minimize CPU usage it is necessary to follow a few precautions. The most important thing is to keep your buffer sizes (latency) as high as possible. There is generally no reason to use latency under 256 samples for 44kHz sampling rates (hence 512 for 96kHz etc.). Increasing buffer sizes (hence also latency) highly decreases required CPU power. In rare cases increasing buffer sizes may actually increase CPU power, in which case you can assume your audio interface driver is malfunctioning.

You should also consider using only necessary features. Usually the most CPU demanding features are oversampling and modulation of certain parameters. You can reduce modulation CPU usage at the cost of lower audio quality in Settings/Settings/Modulator protection.

## Troubleshooting

The plugins are generally very stable, there are known problems however.

### GPU compatibility

The software uses hardware acceleration to move some of the processing (mainly GUI related) from your CPU (processor) to your GPU (graphics processing unit). It is highly recommended to use a new GPU, as it will provide higher performance improvements, and update your GPU drivers. Older GPUs are slower and may not even provide required features, so the software will have to perform all calculations in the main CPU. We also have had extremely bad experiences with GPUs from ATI and despite the fact that software is now probably bulletproof, it is recommended to use NVidia GPUs as there has not been a single case of a problem with them.

If you experience problems with your GPU (crashing, blank/dysfunctional GUI), and that you cannot disable the GPU acceleration from the plugin's Settings window itself, download this file:

<http://www.meldaproduction.com/download/GPU.zip>

And place the GPU.xml included in the zip into

Windows: C:\Users\{username}\AppData\Roaming\MeldaProduction  
Mac OS X: ~/Library/Application support/MeldaProduction

### Memory limits of 32-bit platform

Most hosts are now 64-bit ready, however some of them are not or users willingly choose 32-bit edition, because the required plugins are not 64-bit ready yet. All our software is 64-bit ready. Please note that you must NOT use the 64-bit plugins in 32-bit hosts, even if you have a bridge. If you are stuck with a 32-bit host for any reason, note that there is a memory limit (about 1.5 GB), which you may not exceed. This can happen if you load too many samples or different plugins for example. In that case the host may crash. There is no other solution than to use a 64-bit host.

## Updating

You can use "Home/Check for updates" feature in any of the plugins. This will check online if there is a newer version available and open the download page if necessary.

To install a newer (or even older) version you simply need to download the newest installer and use it. There is no need to uninstall the previous version, the installer will do that if necessary. You also do not need to worry about your presets when using the installer. Of course, frequent backup of your work is recommended as usual.

## Using touch-screen displays

Touch screen displays are supported on Windows 8 and newer and the GUI has been tweaked to provide a good workflow. Up to 16 connections/fingers/inputs are supported. Any input device such as touch-screens, mouse, tablets are supported. These are the main gestures used by the plugins:

- Tap = left click
- Double tap = double click
- Tap & hold and quickly tap next to it with another finger = right click. Tap & hold is a classic right-click gesture, however that doesn't provide a good workflow, so came up with this method, which is much faster and does not collide with functionality of some elements.

# Purchasing and activation

You can purchase the plugin from our website or any reseller, however purchasing directly from our website is always the quickest and simplest option. The software is available online only, purchasing is automatic, easy and instant. After the purchase you will immediately receive a keyfile via email. If you do not receive an e-mail within a few minutes after your purchase, firstly check your spam folder and if the email is not present there, contact our support team using [info@meldaproduction.com](mailto:info@meldaproduction.com) so we can send you the licence again.

To activate the software simply **drag & drop the licence file onto the plugin**. Unfortunately some hosts (especially on Mac OS X) either do not allow drag & drop, or make it just too clumsy, so you can use Home/Activate in any of the plugins and follow the instructions. For more information about activation please check the [online video tutorial](#).

You are allowed to use the software on all your machines, but only you are allowed to operate the software. The licences are "to-person" as defined in the licence terms, therefore you can use the software on all your computers, but you are the only person allowed to operate them. MeldaProduction can provide a specialized licence for facilities such as schools with different licence terms.

## Quick start with your host

In most cases your host will be able to recognize the plugin and be able to open it the same way as it opens other plugins. If it doesn't, ensure you did installation properly as described above and let your host rescan the plugins.

### Cubase

Click on an empty slot (in mixer or in track inserts for example) and a menu with available plugins will be displayed. VST2 version is located in MeldaProduction subfolder. However VST3 version is recommended and is located in the correct folder along with Cubase's factory plugins. For example, dynamic processors are available from the "Dynamics" subfolder.

To route an audio to the plugin's **side-chain** (if it has one), you need to use the VST3 version. Enable the side-chain using the arrow button in the Cubase's plugin window title. Then you can route any set of tracks into the plugin's side-chain either by selecting the plugin as the track output or using sends.

To route **MIDI** to the plugin, simply create a new MIDI track and select the plugin as its output.

### Logic

Choose an empty insert slot on one of your audio tracks (or instrument tracks for example) and select the plugin from the popup menu. You will find it in the Audio Units / MeldaProduction folder.

To route an audio to the plugin's **side-chain** (if it has one), a side-chain source should be available in the top of the plugin's window, so simply select the source track you want to send to the plugin's side-chain.

To route **MIDI** to the plugin, you need to create a new Instrument track, click on the instrument slot and select the plugin from AU MIDI-controlled Effects / MeldaProduction. The plugin will receive MIDI from that track. Then route the audio you want to process with the plugin to this track.

### Studio One

Find the plugin in the Effects list and drag & drop it onto the track you would like to insert the plugin to.

To route an audio track to the plugin's **side-chain** (if it has one), first enable the side-chain using the "Side-chain" button in the Studio One's plugin window title. Then you can route any set of tracks into the plugin's side-chain from the mixer.

To route **MIDI** to the plugin, simply create a new MIDI track and select the plugin as its output.

### Digital performer

In the Mixing Board, find an empty slot in the track you would like to insert the plugin to. Click on the field and select the plugin from the effects list.

To route an audio track to the plugin's **side-chain** (if it has one), choose the track you want to send using Side-chain menu, which appears at the top of the DP's plugin window.

To route **MIDI** to the plugin, simply create a new MIDI track in the Track view and select the plugin as its output.

### Reaper

Click on an empty slot in the mixer and a window with available plugins will be displayed. Select the plugin you want to open by double clicking on it or using Ok button.

*It is highly recommended to select all MeldaProduction plugins in the plugin window the first time you open it, click using your right mouse button and enable "Save minimal undo states". This will disable the problematic Undo feature, which could cause glitches whenever you change certain parameters.*

To route an audio track to the plugin's **side-chain** (if it has one), click on I/O button of the side-chain source track in the mixer. Routing window will appear, there you click "Add new send" and select the track the plugin is on. In the created send slot select the channels (after the "=>" mark) for the send, in stereo configuration 3/4 for example. Note that this way the whole track receives the side-chain signal and all plugins with it. It is possible to send it to a single plugin only, but it is more complicated, please check the Reaper's documentation about that.

To route **MIDI** to the plugin, create a new MIDI track and do the same thing as with side-chain, except you don't need to change output channels.

## Live

In Session view, select the track you would like to insert the plugin to. At the left top of Ableton Live's interface, click on the Plug-in Device Browser icon (third icon from the top). From the plugins list choose the plugin (from MeldaProduction folder), double click on it or drag & drop it into the track.

The X/Y grid usually doesn't provide any parameters of the plugin. This is because the plugins have too many of them, so you have to select them manually. Check Live's documentation for more information.

To route an audio to the plugin's **side-chain** (if it has one), select the track you want to send to the side-chain and in the 'Audio To' menu, choose the audio track that has the plugin on it. Then in the box just below that select the plugin from the menu.

NOTE: Live does NOT support any interface correctly, it doesn't use the reported buses properly, hence it doesn't work with surround capable plugins. Therefore you need to use VST version, which reports only stereo capabilities by default.

To route **MIDI** to the plugin, create a new MIDI track and in the 'MIDI to' menu, choose the audio track that has the plugin on it. Note that in Live only the first plugin on any track can receive MIDI.

## ProTools

In the mixer click an empty slot to insert the plugin to and select the plugin from the tree. The plugin may be present multiple times, once for each channel configuration (mono->stereo etc.). As of now ProTools do not arrange them in the subfolders, which is a workflow dealbreaker, but we cannot do anything about it. The huge empty space on top of each plugin window, which occupies so much of the precious display area, is part of ProTools and every plugin window and again we cannot do anything about it. In some cases you may experience CPU overload messages, in which case please contact Avid for support. Note that ProTools 10 and newer is supported. RTAS compatibility for PT9 and older will never be added.

To route an audio to the plugin's **side-chain** (if it has one), open the plugin, click on the *No key input* button in the plugin title and select the bus you want the audio taken from. You might need to remember the bus number, unless your ProTools version supports bus renaming. ProTools doesn't support stereo (or surround) side-chains at all.

To route **MIDI** to the plugin, create a new MIDI track and in the mixer click the output field for that track and select the plugin, which should already be in the menu.

## FL Studio

First make sure plugins are scanned, either a full scan through the Plugin Manager or an automatic fast scan when you open the Plugin Database section of the browser in FL. The scanned plugins will show up in the Plugin Database > Installed section of the FL browser. The Effects and Generators sections in the Plugin Database will show all "favorite" plugins. These can be checked and unchecked in the Plugin Manager or added in some other ways. These favorites also show up in the Add menu, the menu for the "+" button in the channel rack, when you right click an existing channel button to replace or insert, in the plugin slot menu in the mixer and in the plugin picker (F8). The menus with favorite plugins also have a "More" choice that will show all scanned plugins. The full explanation is in our help file, on the page **Installing Plugins**.

To route an audio to the plugin's **side-chain**, first set up the mixer: make sure the track you want to receive audio from is sent to the track the plugin as a sidechain (**help**). Then set up the plugin wrapper: choose the desired input on the **Processing tab** of the wrapper options.

To route **MIDI notes** to the plugin, first configure the sender: choose a MIDI port for the input device in the MIDI settings (for a hardware device), or an output port in the **wrapper options** (for a VST plugin that produces MIDI). For the receiving plugin, set the input port in the wrapper options to the same value you chose in step 1.

To route **MIDI controllers**, the procedure is different. The usual method in FL is to link CC messages to plugin parameters (**help file**). VST plugins will also have 128 CC parameters published (through the wrapper) that can be linked this way. Those will send the specified CC MIDI message to the plugin, instead of changing a published parameter.

## GUI styles, editor modes and colors

MeldaProduction plugins provide a state of the art styling engine, which lets you change the appearance to your liking. The first time you run the plugins a style wizard will appear and let you choose the style and other settings. It may not be available in ProTools and other problematic hosts.

By default each plugin has a certain color scheme, which differs based on what kind of plugin is that. Also, sections of some plugins are colorized differently, again, based on what kind of section is that (this can be disabled in global settings). Despite you can change the colors anyhow you want, it is advantageous to keep the defaults as these are standardized and have predefined meaning, so just by looking at a plugin's color you can immediately say what kind of plugin and section is that. Same rules apply when designing devices for easy screens. This is the current set of colors:

Dynamics = orange

Equalization, filtering = green  
Reverb, delay = brown/yellow  
Modulation = blue  
Distortion, limiting = red  
Stereo = cyan/yellow  
Time, pitch, unison... = purple/pink  
Tools = grey

Special colors:  
Synchronization = grey  
Detection = blue/green  
Side-chain = green  
Effects = red  
Advanced stuff = grey



**MELDA** production  
*The only limit is your imagination*

## About MeldaProduction

The best sound on the market, incredible workflow and versatility beyond your imagination. We create the deepest and the most powerful audio plugins with unbelievable sound and tons of unique features you cannot find anywhere else.

## Innovative Thinking

At MeldaProduction, we make the most advanced tools for music production and audio processing. We get inspired by the whole range of tools from the ancient analog gear to the newest digital creations, but we always push forward. We've always felt the audio industry is extremely conservative, still relying on the prehistoric equipment making the job unnecessarily slow and complicated. That's why we invent new technologies, which make audio processing easier, faster, better sounding and more creative.

## Sound Matters

In the world full of audiophiles you just need superb audio quality. And that's why we spend so much time perfecting audio algorithms until they sound unbeatable. Everything from dynamic filters to spectral dynamic processing. Our technologies just sound perfect.

## Inspiring User Interface

Modern user interfaces must not only be easy and quick to use, but also versatile and the whole visual appearance should inspire you. MeldaProduction plugins provide the most advanced GUI engine on the market. It is still the first and only GUI engine, which is freely resizable and stylable. Our plugins can look as an ancient vintage gear, if you are working on old-school rock music. Or as super-modern

futuristic devices if you are working on modern electronic music.

## Easy to Use, Yet Versatile

The only limit is your imagination. Our plugins are with absolutely no doubt the most powerful and versatile tools on the market. Yet we managed to make the plugins easy to use via the devices and smart randomization system. But when you are ready, you are one click away from the endless potential the plugins provide.

## Never-Ending Improvements

Most companies create a plugin, sell it and abandon it. We improve our plugins, add features, optimize... until there is nothing left to improve and there are no more ideas. Unfortunately that hasn't happened yet :). And the best thing is that the updates are free-for-life!

*MeldaProduction was founded in 2009 by Vojtech Meluzin and is based in Prague, Czech Republic.*

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