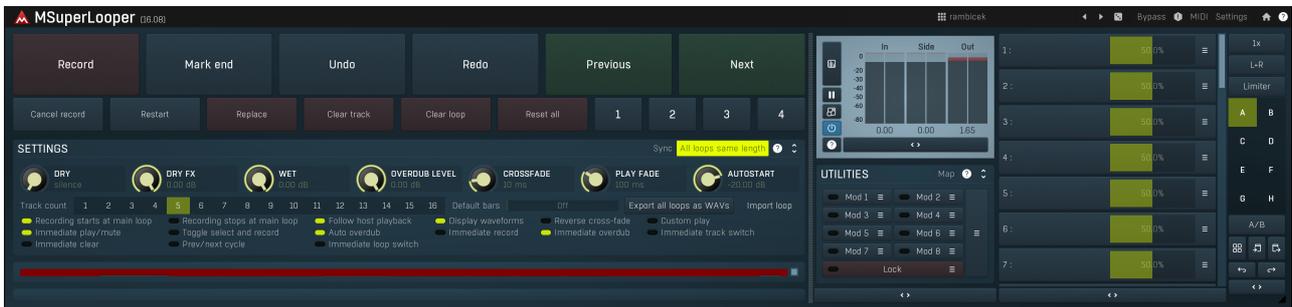


MSuperLooper



Overview

MSuperLooper is a powerful looping plugin useful for live performances and private creativity sessions. It provides up to 16 tracks with up to 4 loops in each of them, and each track has its own modular FX pipeline. It has been created with simplicity and versatility in mind, trying to provide streamlined workflow for multiple use cases, which we will go through here.

Understanding checkpoints

Automating plugins is usually instant, but the situation is very different when making music using live loops. It is generally hard or impossible to hit the first beat of a loop perfectly, which causes particular problems when using multiple tracks. That's why we have introduced the concept of checkpoints.

When using MSuperLooper, you are likely to do most of the fun using just the big buttons at the top of the GUI. These can be attached to a MIDI controller or some other device (see the "Using a MIDI controller" section below).

The function of these buttons is easy to understand, but the underlying logic is actually pretty complex and depends on several settings. The main principle is that most of these buttons are not executed immediately, but on the next checkpoint. The simplest case of a checkpoint is a bar. So for starters imagine that whenever you push most of these buttons, what they do will occur as soon as the current bar ends and the next bar starts. This makes it easy to use the device, since you don't need to think about precise timing and you can quickly switch between tracks when recording. The main loop When you open the plugin, nothing is recorded yet. The first loop that you record is very special, it is called the "main loop" and it affects everything that happens afterwards - every loop that you then record will need to be the same length or a multiple of it. This way all tracks will always be in sync.

When **Sync** is disabled the plugin is running freely without the DAW timing interaction, you can start recording the main loop using the **Record** button. There are multiple ways to stop recording of this first loop. First you can press the **Record** button again, in which case the recording will just stop and the loop will start playing. Or you can press the **Mark end** button, which will not stop the recording, it will only finish the main loop and the recording will continue in the overdubbing mode, which means that whatever you play now will be mixed with the original loop. Or you can press **Previous track** or **Next track** buttons or click directly on any of the tracks to switch to another track and start recording that one, in sync with the main loop of course.

When **Sync** is enabled, the plugin is driven by the DAW's timing. Once you click the **Record** button, the recording starts at the beginning of the next bar, which is the first checkpoint. When you stop the recording using any of the ways described above, it occurs in the next checkpoint, that is, the beginning of the next bar. This lets you make the main loop as long as you like, for example 1 bar or 4 bars, depending on when you stop the recording.

When **Sync** is enabled and **Default bars** parameter is set (that is, not "Off"), the length of the main loop is actually specified by that number, so you don't need to click the **Mark end** button, the plugin set the loop end automatically when the desired number of bars is recorded. When the main loop is recorded Once the main loop recording is finished, a checkpoint occurs every time the main loop ends (or starts, same thing really, it's a loop after all). This way all loops that you then record will be as long as the main loop or a multiple of it, so everything is nicely in sync. This brings us to an important option: **All loops same length**, which makes all loops exactly the same length as the main loop. It is enabled by default, because it makes the workflow significantly easier. With this enabled, the only time that you will need to define the length of a loop by pressing one of the buttons, is with the main loop. And if you also enable **Sync** and **Default bars**, you won't need to do that at all, because the length of all loops will be defined automatically.

Not-synced (free-running) workflow 1: Simple single track looping

You may know the typical scenario from various hardware loopers. You enable the recording, stop the recording at any moment, and then overdub that when you want. So here it is how to do that:

First disable **Sync** (which enables the Autostart level parameter). Then start recording by playing something loud enough (assuming you keep the **AutoStart** at the default -20dB) or hit **Record**. Then you have 2 options:

- A) Press **Mark end** at the moment you want to finish the loop. The plugin will keep recording overdubs. Once you are done, press **Record** again to stop recording and just keep playing something without recording it.
- B) Press **Record** to stop the recording immediately. Then you can keep playing something without recording it.

Later you can start recording again - just click **Record** and when the loop starts from the beginning, recording will start as well.

Not-synced (free-running) workflow 2: Multi-track looping

We can extend the previous simple scenario by taking advantage of the multiple tracks:

First disable **Sync**. Then start recording, same way as before. Then you have a few options, the same ones as before, but there's one more:
C) Switch to another track to keep recording to that one.

When using multiple tracks, you can switch between them by clicking on the tracks or using the **Previous track** and **Next track** buttons. Note that the change will occur only after the next checkpoint - hence when the main loop ends. You can toggle playback for each track, overdub them by simply selecting them and starting recording etc. If you are not happy with a track, you can click **Clear track** to remove all loops in it and start over.

Not-synced (free-running) workflow 3: Multi-track looping with different loop lengths

We can extend the previous scenario even more. So far all loops needed to be the same length. That changes once you disable the **All loops sample length** option. Recording the main loop will be the same as described above but when you start recording another track either by pressing **Record** or by switching to an empty track while recording, you will need to control the loop length, otherwise the looper will keep recording indefinitely. That works in the same way as ending the main loop, except whichever option you choose to stop the recording, it will not happen immediately, but the plugin will wait for the main loop to end instead, just to keep all loops in sync.

Synced workflow: All of it!

Synced recording isn't very different really. Just keep the **Sync** option enabled and enable playback in your DAW. It is recommended not to loop the playback in your DAW, because at the moment your DAW would jump from the loop end to the beginning, the plugin would resynchronize the loops with it and that may not be what you'd like.

The only difference between synced and not synced looping then is the recording of the main loop. The entire workflow is the same, but you cannot start recording by playing, you need to press the **Record** button, and the recording will start at the beginning of the next bar. You can actually press the button while keeping the DAW playback stopped, then run the playback in your DAW and the plugin will start recording at that moment. Ending the main loop also doesn't happen immediately and instead it will wait for the next bar. Apart from that, everything is the same!

Using a MIDI controller

Using MSuperLooper using a mouse may be quite inconvenient. You may use a touch screen computer instead, but that may too be problematic, if you are playing a guitar for example. You are likely to use some MIDI controller in that case. Mapping a MIDI controller is fairly straightforward and available via the **MIDI** button (in the title bar). By default the top buttons are already mapped to the Main controllers, so you can simply open the MIDI settings, switch to **Main controllers** tab and select the controllers you want to use, via MIDI learn for example. Then you can use presets or **Settings / Set default settings** to store these, so you don't need to do that next time.

In the factory defaults for these MIDI controllers there's a little hack worth explaining. Controllers mapped to most buttons work in the obvious way - you press some pedal (or button) on your device, the MIDI controller value is set to maximum, hence the target button is pushed, then you release the pedal, the MIDI controller value is set to minimum and the target button is released. That is, the hardware pedals / buttons are operating in "Momentary" mode (not "Latch" or "Toggle" mode). But the **Record** button is set up differently. It is mapped to 2 MIDI controllers, because you are likely to use one pedal to start recording and another to stop recording. So one controller is set to set the value of the **Record** to minimum (as "stop") and another to maximum (as "start"). If you'd like to use a single pedal which you would hold as long as the recording should continue and then release it to stop recording, map it the simple way - as done for all the other controllers.

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.



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 plug-in 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 plug-in.

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 plug-ins, 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.

A dark blue rectangular button with the word "Record" in white, centered text.

Record

Record button toggles recording of selected track. The recording starts as soon as the next checkpoint is reached. Similarly if the recording is already active, clicking the button again will stop the recording as soon as the next checkpoint is reached. Please check the plugin info about checkpoints and workflow.

A dark blue rectangular button with the words "Mark end" in white, centered text.

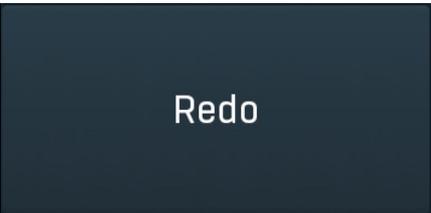
Mark end

Mark end button marks the end of the loop while recording. It is useful only if the length of the loop is not known yet, in other words you didn't record it yet. If no loop has been recorded yet and **Sync** is disabled, the recording is stopped immediately and this becomes 'main'. Otherwise the end of the loop occurs at the next checkpoint. Once the loop ends the recording continues in overdub mode.

A dark blue rectangular button with the word "Undo" in white, centered text.

Undo

Undo reverts the previous overdub for selected track. When you press the **Record** button and start overdubbing and make a mistake in the current overdub, press this button before the loop ends and the overdub will be cancelled, so you can try again. If you press it again, you can revert any previous overdub as well.

A dark blue rectangular button with the word "Redo" in white, centered text.

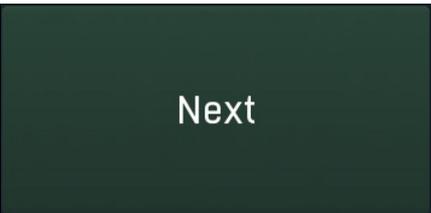
Redo

Redo reverts the previous undo for selected track.

A dark green rectangular button with the word "Previous" in white, centered text.

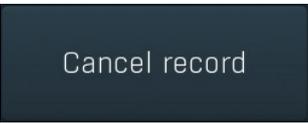
Previous

Previous switches to the previous track at the next checkpoint. It also works while recording in which case the previous track will start recording then.

A dark green rectangular button with the word "Next" in white, centered text.

Next

Next switches to the next track at the next checkpoint. It also works while recording in which case the next track will start recording then. It automatically increases the number of tracks if needed.

A dark blue rectangular button with the words "Cancel record" in white, centered text.

Cancel record

Cancel record button undoes the previous hit to the **Record** button. It is useful when you accidentally hit the record button, so you plan the recording on the next checkpoint.

Restart

Restart

Restart button jumps the playback to the beginning. You can use this to create various rhythmical stutter effects. It is available only in non-synced mode of course.

Replace

Replace

Replace switch makes the engine replace the current loop with the input. Click it to start replacing, click again to stop it.

Clear track

Clear track

Clear track deletes all loops in the selected track as soon as the next checkpoint is reached. It lets you sort of start over with the current track. It doesn't disable recording, so you can press it while recording to clear the track and then keep on recording after the next checkpoint.

Clear loop

Clear loop

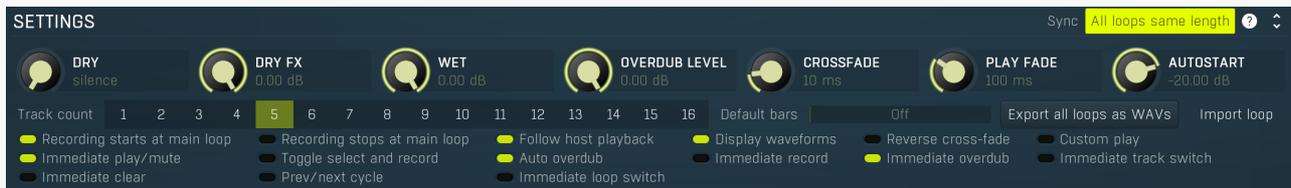
Clear loop clears the current loop in the selected track as soon as the next checkpoint is reached. It lets you sort of start over with the current loop. It doesn't disable recording, so you can press it while recording to clear the track and then keep on recording after the next checkpoint.

Reset all

Reset all

Reset all destroys all loops in all tracks, so you can start from scratch.

Settings panel



Settings panel defines the looper workflow and behaviour.

Sync

Sync enables syncing to your DAW. It makes the plugin listen to the tempo and signature and produce the checkpoints for recording appropriately, so that you are always in sync with the DAW. Note that the tempo and signature must NOT change, since that would require the length of the loops to change as well.

All loops same length

All loops same length option makes all loops have an identical length by automatically stopping the recording when needed. This way you will only need the **Mark end** button once, when recording the very first loop, which will then define the length of all loops recorded later. It's enabled by default, since it is easier to use like that, however it may be a bit limiting. If this option is off, other loops may be of a different length, but always a multiply of the main loop's length, so that everything is kept in sync. In that case, every time you are recording an empty loop, you'll need to mark its end using **Mark end** or **Record** buttons.

DRY
silence

Dry

Dry controls how much of the dry input is passed to the output. This is silent by default, since it usually makes more sense to pass the input to the effect section of the selected track instead.

Range: silence to 0.00 dB, default silence



DRY FX
0.00 dB

Dry FX

Dry FX controls how much of the dry input is passed to the input of the selected track's effect section. Imagine recording voice for all tracks. Vocal "drums" are likely to be processed using some compression and distortion for example. Vocal "bass" may use some hard EQ and subbass generator. And the actual vocal will enjoy some reverb. It is logical that while recording these tracks the dry input is already effected properly depending on which instrument you are recording. That's why Dry FX is 0dB by default, **Dry** is silence.

Range: silence to 0.00 dB, default 0.00 dB



WET
0.00 dB

Wet

Wet defines the output looper signal volume. Please note that this includes the effected dry input via **Dry FX**.

Range: silence to 0.00 dB, default 0.00 dB



OVERDUB LEVEL
0.00 dB

Overdub level

Overdub level controls the level of the signal added to the recorded loops when overdubbing. Normally you leave it the same, but in some cases you may want the first record to be more prominent than the overdubs.

Range: silence to 0.00 dB, default 0.00 dB



CROSSFADE
10 ms

CrossFade

CrossFade controls the length of the fade-in/out applied on the beginning and ending of each loop to avoid potential clicks.

Range: 0 ms to 10000 ms, default 10.0 ms



PLAY FADE
100 ms

Play fade

Play fade controls how quickly a track fades in/out when being muted or unmuted.

Range: 0 ms to 10000 ms, default 100 ms



AUTOSTART
-20.00 dB

AutoStart

AutoStart controls the minimum level at which the recording of the first loop automatically starts. This is applicable only when sync is disabled. It is useful to start the actual recording sassing exactly at the moment you make the first sound, without the need to actually press a button.

Range: -80.00 dB to Off, default -20.00 dB

Track count	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
-------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----

Track count

Track count controls the number of tracks you need. You can add more tracks on the fly if needed.

Range: 1 to 16, default 4

Default bars | Off

Default bars

Default bars controls the default length of all loops and works only with **Sync** enabled. Use it only if you know the length of each loop before you start recording. It completely frees you from using the **Mark end** button, since the engine knows the expected loop length before you even start.

Range: Off to 64, default Off

Export all loops as WAVs

Export all loops as WAVs

Export all loops as WAVs button lets you export all loops from all tracks into a folder and is useful when you have created something interesting and you want to work on it using audio files.

Import loop

Import WAVs

Import WAVs button lets you load an audio file into selected loop in selected track. You can simply drag & drop an audio file onto the loop button instead.

Recording starts at main loop

Recording starts at main loop

Recording starts at main loop option makes the plugin always start recording after the main loop (the first loop being recorded) ends. This is always true in nonsynced mode, but when the sync is active, it is sometimes confusing to record with this option off, because when you press **Record**, you naturally expect the recording to start when the main loop ends, but it could start in the middle without this option, just because a bar has ended.

Recording stops at main loop **Recording stops at main loop**

Recording stops at main loop option makes the plugin always stop recording after the main loop ends. This is always true in nonsynced mode, but when the sync is active, it is sometimes confusing to record with this option off, because when you press **Record**, you naturally expect the recording to start when the main loop ends, but it could start in the middle without this option, just because a bar has ended.

Follow host playback **Follow host playback**

Follow host playback option makes the plugin play and record only if the host playback is enabled. This option is available only if sync is disabled.

Display waveforms **Display waveforms**

Display waveforms lets you spare some CPU normally needed to update the images of the waveforms being displayed.

Reverse cross-fade **Reverse fade**

Reverse fade option controls how the plugin performs loop cross-fade or a newly recorded loop. Normally the plugin simply performs a short fade-in in the beginning of the loop and fade-out at the end of it. This creates a tiny gap, which may be audible if the cross-fade time is bigger. When you activate this option, it will make a seamless blend by cross-fading the end of the loop with the reversed portion of the beginning. This may work nicely especially for pad-like sounds.

Custom play **Custom play**

Custom play switch displays a custom **Play** button, which lets you start/stop playback internally instead of following the DAW. It is available only when **Sync** is off.

Immediate play/mute **Immediate play/mute**

Immediate play/mute makes the record start immediately instead of waiting for the next checkpoint.

Toggle select and record **Toggle select and record**

Toggle select and record makes the 'Select and record' switch available for each track work as a toggle - the first enable selects the track and starts recording, next one stops it.

Auto overdub **Auto overdub**

Auto overdub option makes the engine automatically switch to overdubbing after the initial recording is finished. Normally this is enabled, so that after the first pass the recording continues, overdubbing the loop.

Immediate record **Immediate record**

Immediate record makes the record start immediately instead of waiting for the next checkpoint. Similarly the recording will be stopped without waiting for the next checkpoint. Note that this will also expect that all loops are to be same length.

Immediate overdub **Immediate overdub**

Immediate overdub makes the record start immediately when overdubbing instead of waiting for the next checkpoint. Similarly the recording will be stopped without waiting for the next checkpoint.

Immediate track switch **Immediate track switch**

Immediate track switch makes the record switch between track immediately instead of waiting for the next checkpoint.

Immediate clear **Immediate clear**

Immediate clear makes the clear loop commands immediately clear the current recording. This is useful if you want to clear the current take but keep recording it.

Prev/next cycle **Prev/next cycle**

Prev/next cycle option keeps cycling through tracks when pressing **Previous** and **Next** instead of creating more tracks.

Immediate loop switch **Immediate loop switch**

Immediate loop switch option makes the switch between loops happen immediately instead of waiting for the next checkpoint. Option works also during recording, except the recording track itself. When all loops are same length, there is no potential issue. If you are immediately switching to longer loops than main loop, you can lose initial relative sync. Use with care.

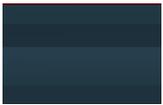
Main loop position indicator

Main loop position indicator is a green/red meter which shows the main loop (very first loop) current position. It is useful for orientation if there are either no loops visible, or loops with lengths different than main loop.



FX & Settings

FX & Settings button displays additional settings of this track plus its effect pipeline.



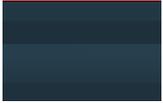
Gain

Gain controls the output volume for this track.
Range: -40.00 dB to +20.00 dB, default 0.00 dB



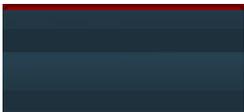
Volume

Volume controls the output volume for this track.
Range: silence to 0.00 dB, default 0.00 dB



Panorama

Panorama controls the output panorama for this track.
Range: 100% left to 100% right, default center



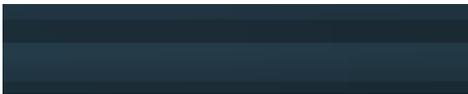
Play

Play button enables playback for this track. It is enabled by default.



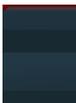
Reverse

Reverse switch makes the playback go backwards from the end of the loop to its beginning. A change takes effect after the loop has ended.



Audio file view with export (drag) function

Audio file view with export (drag) function displays the audio being played/recorded and a playback/record position indicator. You can also drag selected loop and export it as audio file (.wav) i.e to DAW, or any track with some empty loop.



Reset

Reset button destroys selected loop in the selected track. It is pretty much the same as clicking **Clear loop**, but here you can clear any of the loop without selecting its track. The deletion also happens immediately, while **Clear loop** waits for a checkpoint. If the deleted loop was in recording state, recording is stopped.



Global meter view

Global meter view provides a powerful metering system. If you do not see it in the plug-in, 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.



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

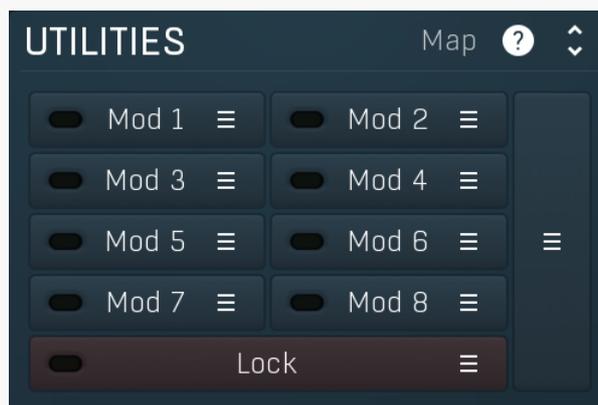
Enable button enables or disables the metering system. You can disable it to save system resources.



Collapse

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

Utilities



Map

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



Modulator

Modulator button displays settings of the modulator. It also contains a checkbox, to the left, which you can use to enable or disable the modulator. Click on it using your right mouse button or use the **menu button** to display an additional menu with learning capabilities - as described below.



Menu

Menu button shows the **smart learn** menu. You can also use the right mouse button anywhere on the modulator button.

Learn activates the learning mode and displays "REC" on the button as a reminder, **Clear & Learn** deletes all parameters currently associated with the modulator, then activates the learning mode as above. After that every parameter you touch will be associated to

the modulator along with the range that the parameter was changed. Learning mode is ended by clicking the button again.

In smart learn mode the modulator does not operate but rather records your actions. You can still adjust every automatable parameter and use it normally. When you change a parameter, the plugin associates that parameter with the modulator and also records the range of values that you set.

For example, to associate a frequency slider and make a modulator control it from 100Hz to 1KHz, just enable the smart learn mode, click the slider then move it from 100Hz to 1KHz (you can also edit the range later in the modulator window too). Then disable the learning mode by clicking on the button.



Menu

Menu button displays additional menu containing features for modulator presets and randomization.



Lock

Lock button displays the settings of the global parameter lock. Click on it using your left mouse button to open the Global Parameter Lock window, listing all those parameters that are currently able to be locked.

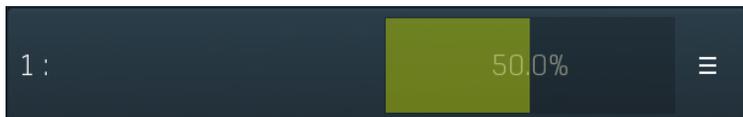
Click on it using your right mouse button or use the **menu button** to display the menu with learning capabilities - **Learn** activates the learning mode, **Clear & Learn** deletes all currently-lockable parameters and then activates the learning mode. After that, every parameter you touch will be added to the lock. Learning mode is ended by clicking the button again.

The On/Off button built into the Lock button enables or disables the active locks.



Collapse

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



Multiparameter

Multiparameter button displays settings of the multiparameter. The multiparameter value can be adjusted by dragging it or by pressing Shift and clicking it to enter a new value from the virtual keyboard or from your computer keyboard.

Click on the button using your left mouse button to open the **Multiparameter** window where all the details of the multiparameter can be set. Click on it using your right mouse button or click on the **menu button** to the right to display an additional menu with learning capabilities - as described below.



Menu

Menu button shows the **smart learn** menu. You can also use the right mouse button anywhere on the multiparameter button.

Learn attaches any parameters, including ranges. Click this, then move any parameters through the ranges that you want and click the multiparameter button again to finish. While learning is active, "REC" is displayed on the multiparameter button and learning mode is ended by clicking the button again.

Clear & Learn clears any parameters currently in the list then attaches any parameters, including ranges. Click this, then move any parameters through the ranges that you want and click the multiparameter button again to finish. While learning is active, "REC" is displayed on the multiparameter button and learning mode is ended by clicking the button again.

Reset resets all multiparameter settings to defaults.

Quick Learn clears any parameters currently in the list, attaches one parameter, including its range and assigns its name to the multiparameter. Click this, then move one parameter through the range that you want.

Attach MIDI Controller opens the MIDI Settings window, selects a unused parameter and activates MIDI learn. Click this then move the MIDI controller that you want to assign.

Reorder to ... lets you change the order of the multiparameters. This can be useful when creating active-presets. Please note that this feature can cause problems when one multiparameter controls other multiparameters, as these associations will not be preserved and they will need to be rebuilt.

In learning mode the multiparameter does not operate but rather records your actions. You can still adjust every automatable parameter and use it normally. When you change a parameter, the plugin associates that parameter with the multiparameter and also records the

range of values that you set.

For example, to associate a frequency slider and make a multiparameter control it from 100Hz to 1KHz, just enable the smart learn mode, click the slider then move it from 100Hz to 1KHz (you can also edit the range later in the Multiparameter window too). Then disable the learning mode by clicking on the button.



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

