Mikron Reverb

Manual

112dB

LO
(Page 12)

HI
(Page 12)

PRESET MENU
(Page 9)

SPIN
(Page 13)

POSITION
(Page 13)

Concert Hall

PREV   NEXT

LO   HI   SIZE   SPIN   POSITION   INSERT MODE

MIKRON REVERB

SIZE
(Page 12)

INSERT MODE
(Page 13)

ON/OFF
(Page 14)

Introducing...

Mikron Reverb is based on 112dB's highly acclaimed Redline Reverb. It has the same lush, 'lexicon-ish' sound, but has a completely different mode of operation. In Mikron Reverb the majority of the parameters of Redline Reverb are hidden in the size knob, which incorporates an intelligent algorithm that determines the ideal settings for those parameters for a certain room size.

The idea behind this is that when you select a certain kind of reverb you usually are not interested in the reverberations of all possible rooms and positions in those rooms, but only those that will give you a superb or interesting sound. There are a lot of concert halls, but only a few are praised for their acoustics. And there is only one spot in a concert hall were the band sounds at its best. It's those great sounding reverberations that we tried to capture.

Or to get a bit more technical: there is a reason that certain spaces sound great, or that when you stand in the center of a room the sound is less good than when you move a little to the front. And that has everything to do with how the different parameters of the reverberations are balanced: early reflections, decay time etc. The magical formula for this is still unknown, one of the reasons why architects still have difficulties designing the perfect concert hall. But we think we have been able to come up with an approximation of it. Unlike the formulas architects use, it is mostly based on hearing and not on science. And most definitely based on personal preference, not on a universal truth. But we dare say that it does a hell of a job. What does this mean in practice? It saves you a lot of unnecessary tweaking. Whatever knob you turn, the reverberation keeps sounding great, just different.

The mikron series

The 112dB Mikron series is all about simplicity. We believe that too many features can stand in the way of the creative process. Simply said: more features also means more tweaking and having to delve into all kind of technical details. And that often distracts you from what it's al about: creating music. You really don't need that many knobs to get a great sound. The effect pedals for guitars are a perfect example of this. Their limited functionality is more than compensated by their fun to use. Or do you really believe that Jimi Hendrix and Kurt Cobain would have made better music if they just had these few extra knobs on their stompboxes? Limitations often inspire creativity instead of blocking it.

INSTALLATION

A. DOWNLOADING THE LATEST INSTALLER

To make sure you are running the latest version of Mikron Reverb please visit our Product Updates page at www.112dB.com/download/mikron/reverb and download the latest installer for your operating system. (If you already have a demo with the same version number installed you may skip this step and continue to C. Authorizing the plugin below.)

B. PLUGIN INSTALLATION

Mikron Reverb comes in the form of a single installer for all available plugin formats: VST3, AAX, and Audio Units.

MAC OSX

1. Double click the Mikron Reverb Installer. pkg file to start the installer. If everything goes as expected, you will now see the welcome screen shown on the right.

2. You might want to have a quick look at the readme, as it may contain important last-minute information that was not available at the time of writing.

3. You will be asked to agree to the terms of the license agreement.

4. The installer installs all plugin formats (VST3, AAX, and Audio Units) by default.

5.. You will be prompted for your Mac password to complete the installation.

6. If the installer detects you haven't activated your license yet, the 112dB License Manager will be started.
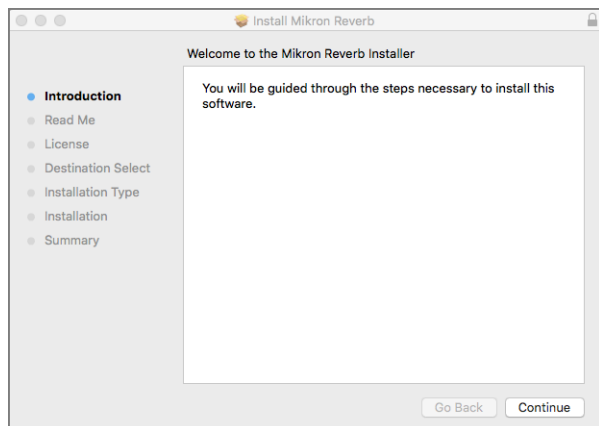
Windows

1. Double click the Mikron Reverb Installer.exe file to run the setup program.

Windows might give you the following warning:
'Microsoft Defender SmartScreen prevented an unrecognized app from starting. Running this app might put your PC at risk'
No need to worry, this simply means that the installer is too new to be recognized by Microsoft Defender yet. We can assure you that we're not in the habit of putting malware in our plugins, so if you downloaded the installer from our website, you can safely ignore this. Click on 'More info'. Make sure that 112dB is mentioned as Publisher. Then click 'Run Anyway'.
Depending on your system settings, you now might get another message: 'Do you want to allow this app to make changes to your device?' Click 'yes' to continue with the installation.
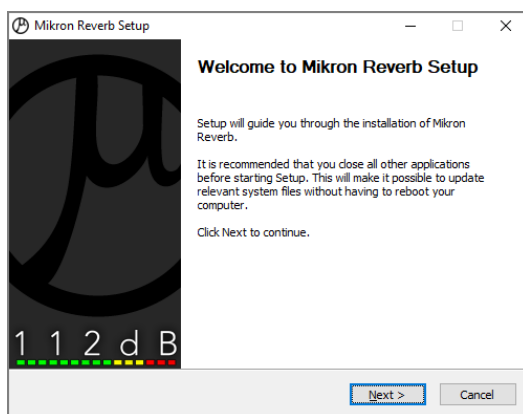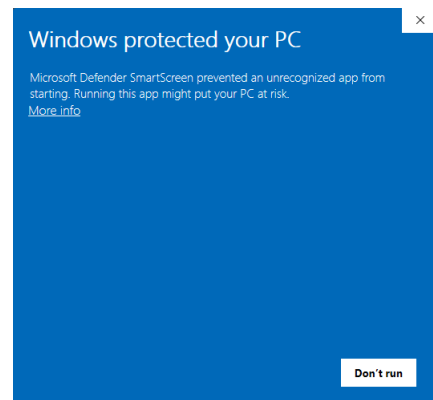
2. If everything goes as expected, you will now see the welcome screen shown on the left.

3. In the next step you will be asked to agree to the terms of the license agreement.

4. The installer installs all plugin formats (VST3 and AAX) by default.

5. When Mikron Reverb has been installed, Setup is complete and you may click the Finish button. By default 'Start the 112dB License Manager' will be selected. Keep it selected if you haven't activated your license yet, and want to activate it now. If you already have a license installed, you can deselect it.

6. You might want to have a quick look at the readme, that was installed in \Program Files\112dB\Mikron Reverb, as it may contain important last-minute information that was not available at the time of writing.
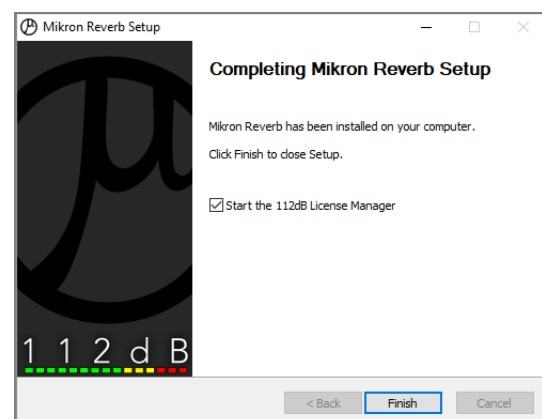
C. Authorizing the plugin

With your purchase or demo download you should have received an email containing a license file (in the form of an XML-document). Save this file to your computer.

The 112dB License Manager will be started automatically after the installation is finished. Drag and drop your license file on the License Manager window. Or alternatively click on 'locate license...' , navigate to the folder where you saved the license file, select it, and click 'Open'. You can decide to skip this step, and activate your license later from within the plugin.
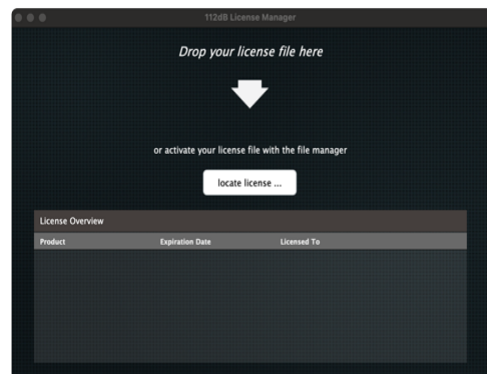
from demo to permanent license

To replace a demo license with a permanent license, first save the permanent XML license from your purchase confirmation email to your computer. Open the 112dB License Manager (see 'Where can I find the License Manager?' below). Drag and drop your license file on the license manager window to activate Mikron Reverb. Or alternatively, click on 'locate license...' , navigate to the folder where you saved the license file, select it, and click 'Open'. In your License Overview you will now see 'perpetual' instead of a specific expiry date for Mikron Reverb under 'Expiration Date' .

where can i find the license manager?

The 112dB License Manager can be found here:

Windows: \Program Files\112dB

Mac: /Applications/112dB

troubleshooting

Some email clients do not like plain text attachments. For this reason the license is attached in both text (.xml) and zipped (.zip) formats. If you receive an error message saying that the 112dB Mikron Reverb .xml license is invalid or corrupt, the most likely cause is that it got corrupted during email transfer. In this case please save the 112dB Mikron Reverb License.zip attachment to your computer instead, unzip the file (this will produce a 112dB Mikron Reverb License .xml file) and try authorizing again.

support

If you encounter any problems during the installation or authorization process, please contact us by email at support@112dB.com.

Installing on multiple computers

The license file you received is not tied to a specific computer, only to a specific person. You can use the same license file to authorize the plugin on any system, as long as it is yours. This way you can install and use the plugin on your studio setup, your home computer, and your travel notebook at the same time.

Uninstalling

The uninstaller for Mikron Reverb can be found here:

Mac: /Applications/112dB/Mikron Reverb
Windows: \Program Files\112dB\Mikron Reverb

In addition the uninstaller will be listed on Windows under Control Panel » Add/Remove Programs.

Installation locations

Factory presets:

Mac: /Library/Application Support /112dB/Mikron Reverb
Windows: \Program Data\112dB\112dB\Mikron Reverb

User presets:

Mac: /Documents/112dB/Mikron Reverb/User Presets
Windows: \Documents\112dB\Mikron Reverb\User Presets

License Manager:

Mac: /Applications/112dB
Windows: \Program Files\112dB

VST3-plugin:

Mac: /Library/Audio/Plug-Ins/VST3
Windows: \Program Files\Common Files\VST3

AAX-plugin:

Mac: /Library/Application Support /Avid/Audio/Plug-Ins
Windows: \Program Files\ Common Files\Avid\Audio\Plug-Ins

AU-plugin:

Mac: /Library/Audio/Plug-Ins/Components

Manual

The manual for Mikron Reverb can be downloaded from our website:

www.112db.com/plugins/mikron/reverb/help/Manual.pdf

The Mikron Reverb user interface has been designed to be as intuitive and easy to operate as possible. There are functions that might not be immediately obvious, however, and could use some explanation.:

RESIZE

To change the size of the GUI, you can drag at the corner of the plugin window, but you can also right (cmd)-click anywhere on the plugin interface and select your size of choice in the pop-up window that will appear.

TOOLTIPS

Hovering over any item of the interface brings up a floating tooltip window with a brief description of that control's function. If you want to disable this function, right (cmd)-click anywhere on the plugin interface and deselect 'Show tooltips' in the pop-up window that will appear.
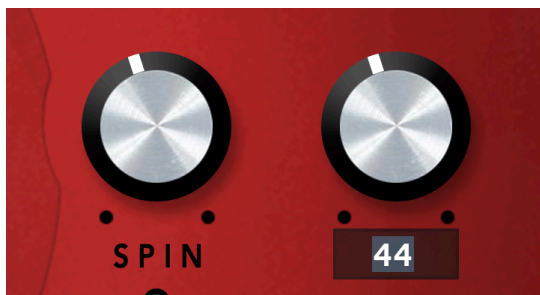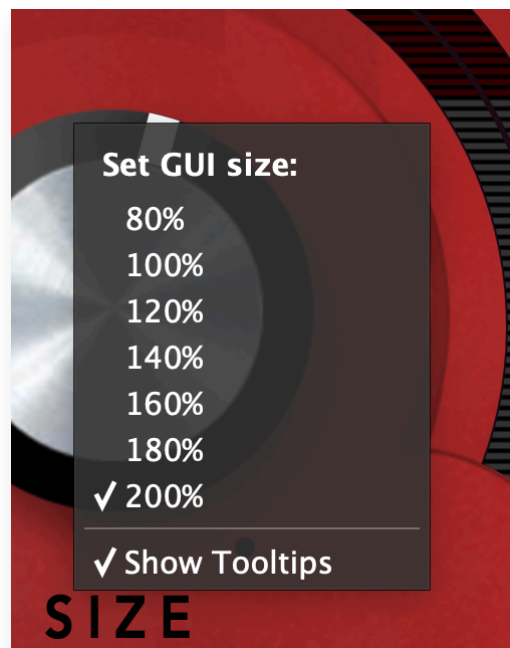
NUMERICAL ENTRY

Turning a knob or hovering over it will change the name below the knob into it's value. Clicking on this number will open a small edit window that allows you to change this value by typing in a new one To dispose of the edit window either hit <Enter> or click anywhere outside it.

RESET TO DEFAULT VALUE

<Ctrl>-clicking knobs and sliders will reset them to their default value.

FINETUNE

Cmnd-click-drag makes very small moves with the knob possible.

Midi Automation

All knobs can be controlled by an external MIDI keyboard or MIDI controller. To assign a MIDI control simply right- (cmd-)click on the knob you want to connect and and a window will pop up: 'Start MIDI learn'.

Click on this window, and move the control on your external MIDI keyboard or controller that you want to assign to this knob. If everything goes as expected, you will now see the knob moving when you move the control on your MIDI keyboard. Right-click (ctrl-click) on the control again and click 'Stop MIDI learn'. Do you want to detach the knob again? Right (ctrl)-click on the knob, and choose: 'Detach from midi automation'
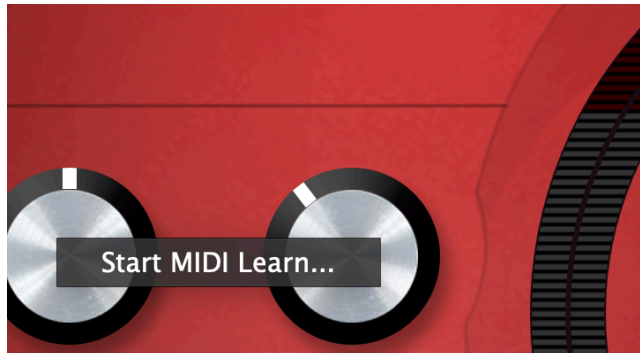
Mikron Reverb comes with a set of carefully selected factory presets, and of course, there is an option to add your own presets as well. The name of the currently selected preset is displayed in the preset display at the top of the plugin.

For quick access to presets there's the preset menu: a drop-down list of presets you can scroll through. Clicking on the preset name will open up a menu. At the top of it you will find two items: Factory Presets, and User Presets. Factory Presets contains the presets that come with the plugin. They can't be altered. Under User Presets you will find the presets that you added yourself. Those you can change in any way you like.

Clicking on 'User Presets' or ' Factory Presets' brings up a complete list of currently loaded presets, optionally organized by category, from which you can select a new preset. The currently selected preset is shown with a a checkmark (√) in front of it, as are the category folders in which it resides.

Alternatively you can use the prev/next buttons next to the preset menu to move one preset up or down

CREATING A PRESET

So you found a great new setting that you want to save as a preset. Use 'save' to save it under the current name (the name that is shown in the display). 'Save as' gives you the option to choose a different name and/or a different location for your preset.

Organizing presets

Clicking on 'Show User Preset Folder' will open a file manager window of your computer. If you want to delete a preset or change its name, you can do it here. You can also add subfolders, or anything else you would do in the file manager. After you are done select 'Rescan Presets' from the drop down menu to see you changes reflected in the menu.

Load

This enables you to load presets from a different location than your User Preset Folder.

Set as default

This sets the current preset as the default preset Mikron Reverb will start up with.

Exchanging Presets

You created a preset on another computer or want to use some presets that someone else made? No problem. The only thing you need to do is to save these preset(s) in the User Presets folder on your computer. If you haven't changed the location of this folder, it can be found in / Documents/112dB/Mikron Reverb

Or if you just want to have a quick look at a preset, use 'Load' in the preset menu, go to the place where you saved your presets, select a preset, and click 'open'. Note that you have to save this preset to your User Presets if you want it to show up in the preset menu .

Lo (-12dB-+12dB)

Determines how much low frequencies there will be in the reverb signal and how fast they will die out.

Hi (-12dB-+12dB)

Determines how much high frequencies there will be in the reverb signal and how fast they will die out.

The hi and lo knob can be seen as a means to simulate the materials in a room. If a room contains a lot of soft materials such as carpets or curtains the high frequencies will be damped more than the lower ones. In a tiled room like a bathroom on the other hand, the high frequencies will take longer to die out. In a room with a lot of small surfaces the low will be damped more, because it will be less well reflected.
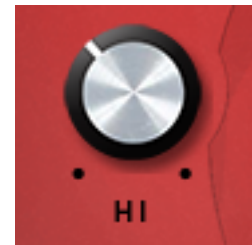
Essentially the hi and the lo knob are a combination of damping and EQ. A negative value means that the hi or low will be damped, a positive value that they will be emphasized.

Size (0-100)

Sets the size of the reverb (the reverberation time of the room). Basically this knob enables you to set the size of the room. A size of 0 is comparable to a room with a length of 2.6 meter. A size of 100 is approximately a room with a length of 666 meter.

The size knob is a combination of several different knobs that you will find in a classical reverb: 'reverb time (decay)', 'pre-delay', 'early reflections' and 'late reflections' (for definitions see below) . In a larger space those parameters will be different than in a small one. The size knob takes this into account, and adjust the parameters proportionally. However when you turn this knob, not only the size of the room will change, but also the place where the listener and source of the sound are located. In a room there will always be 'sweet spots' for speakers and listeners, where the sound is at its

best. Where those spots will be depends on the size of the room. The size knob of Mikron Reverb assumes that listener and source will always be located at the sweet spot. The reverb time (decay), pre-delay, early and late reflections will be adjusted accordingly.

reverb time (decay): the time it takes for the reverb to reduce in level.

early reflections: The time between and diffusion of the first echoes of the sound source directly bouncing off the walls, ceiling, and floor

late reflections: the reflections of the reflections bouncing back and forth (the tail of the reverb).

pre-delay: the time between the direct sound and the early reflections

Spin (0-1)

Determines the amount of detuning of the reverb. Increasing spin results in a fuller, richer sound.

Position (0-100%)

The position knob enables you to set the position of the listener. When insert mode is on, position is a combination of early/late mix (the relative loudness of the early and late reverb) and dry /wet mix. If you are closer to a source in a real environment, there will be relatively more early reverb, and the mix will be also more dry (less reverb). The position knob reflects this.

When you turn of insert mode, Mikron Reverb will be treated as a send effect. In this case the dry/wet mix will be always 100%. The position knob will still determine the early/late mix, but if you want the dry/wet mix to reflect the position of the listener in the room as well, you will have to tune it that way yourself through the send.
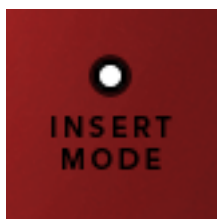
Insert Mode

Mikron Reverb can be used both as a send and an insert effect. Depending on which mode you choose, the position knob will function differently (see above).

Traditionally reverbs are used as send effects. They are placed on an auxiliary bus. The reverb is applied to a copy of the signal, while the

original audio will stay intact. This way you can use one reverb instance for multiple tracks, which saves CPU. In this scenario Mikron Reverb should not output the direct signal, but only the effect. In other words: it should be always 100% wet. So when using the Mikron Reverb as a send effect, make sure that the 'insert mode' button is off.

An alternative would be to use a reverb as an insert effect. In this case you insert the effect directly on the track you want to apply the reverb to. This opens up all kinds of creative possibilities. Something guitarists know perfectly well, because they are used to stomp-boxes, which are insert effects by nature. You can make the reverb part of an effects chain for example, adding a chorus or a phaser after the reverb. In this scenario it is important that the Reverb mixes the direct signal with the effect. When using the Mikron Reverb as an insert effect, make sure that the 'insert mode' button is on. Because now you can use the position knob to determine the dry/wet mix.
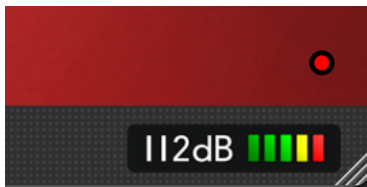
ON/OFF

This button at the bottom right gives you an easy way to bypass Mikron Reverb. When the light is on, the effect is applied to the signal. When it is off, the effect is disabled.

SYSTEM REQUIREMENTS

OPERATING SYSTEM

- Windows 10 or up
- Mac Os X (Intel or Apple Silicon): 10.11 (El Capitan), and up

HOSTS

Mikron Reverb is compatible with any host that understands the AAX, VST3, and/or Audio Units protocol.

UPDATES AND SUPPORT

Updates will be made available at

www/112dB.com/download/mikron/reverb

For product support, questions, comments, feature suggestions, and anything you feel is worth sharing, please contact our support staff by email at

support@112dB.com

CREDITS

Special shouts to our dedicated beta testers