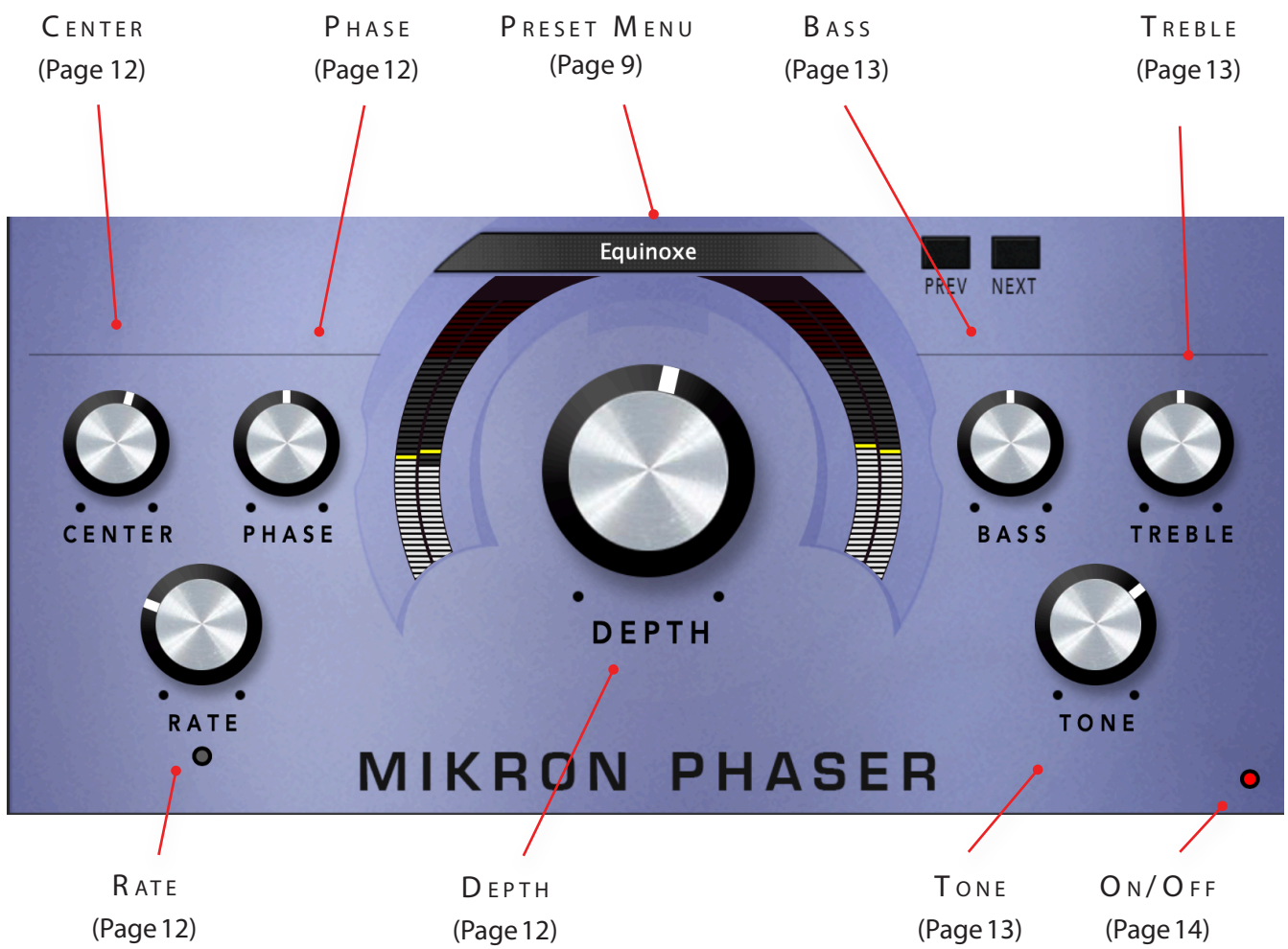


Mac OS X • Windows • AAX/Audio Suite/Audio Units/VST • 64 bit

Mikron Phaser Manual

112dB 

QUICK INDEX



INTRODUCING...

Mikron Phaser was modeled after the legendary Small Stone Phaser, a stomp box effect designed by one of our all-time heroes: David Cockerell. The effect was made famous by the French composer Jean Michel Jarre who used it extensively on his recordings. If you ask us it is without doubt the best phaser ever made. It has a smooth, vibrant seventies sound that will never grow old, and is equally suited for guitar and synthesizer. While we tried to replicate the original sound of the Small Stone Phaser as accurately as possible, we added a few modern details as well. First of all, it's stereo. Plus you can set not only the LFO rate and the 'color' of the phaser, but also adapt the center frequency, the degrees that the LFO's will be out of phase, and how much the pitch will be modulated up and down. And finally, the bass and treble knobs are a handy addition that can help sometimes to get the sound 'just right', to let it fit a little better in the mix.

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 all 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 Phaser please visit our Product Updates page at www.112dB.com/download/mikron/phaser 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 Phaser 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 Phaser Installer.pkg file to start the installer. If everything goes as expected, you will now see the welcome screen shown on the right.

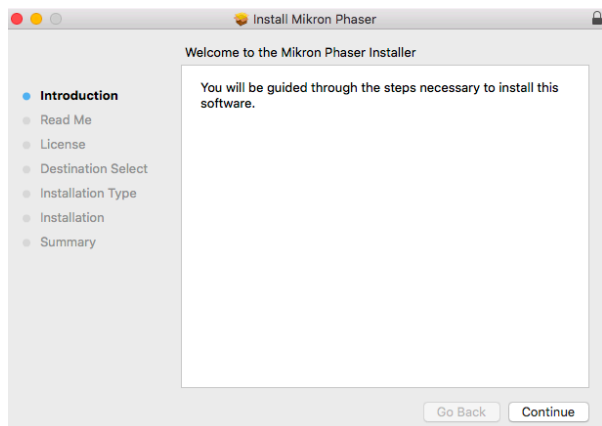
2. You might want to have a quick look at the readme, as it may contain important last-minute information that was not available at the time of writing.

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.



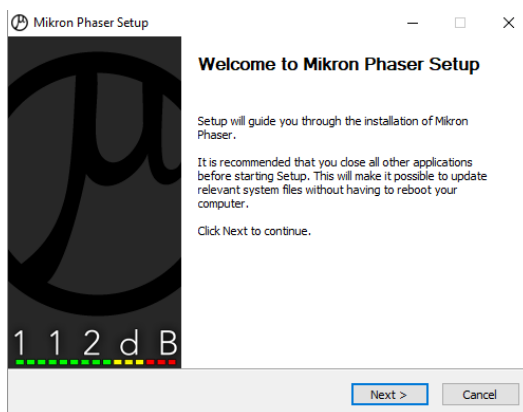
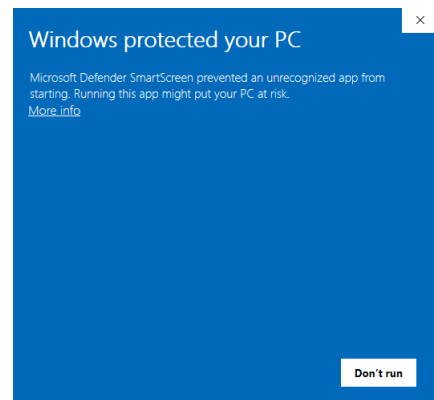
WINDOWS

1. Double click the Mikron Phaser 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.



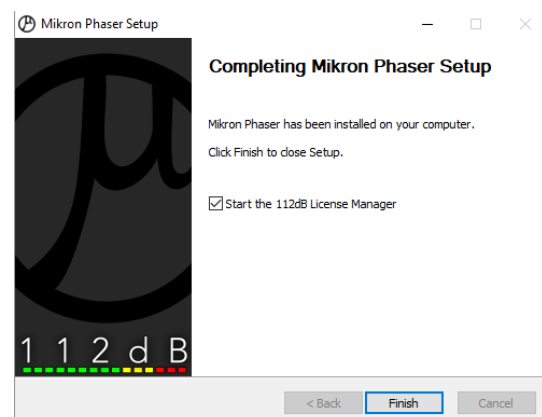
2. If everything goes as expected, you will now see the welcome screen shown on the left.

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 Phaser 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.

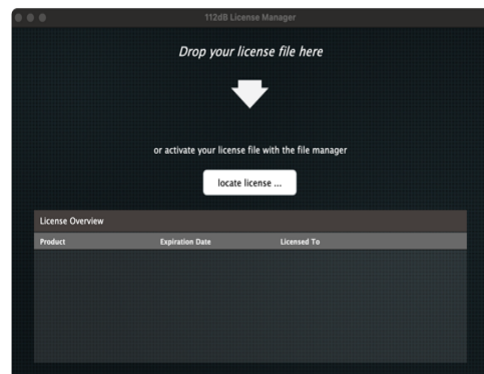
6. You might want to have a quick look at the readme, that was installed in \Program Files\112dB\Mikron Phaser, as it may contain important last-minute information that was not available at the time of writing.



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 Phaser. 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 Phaser 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 Phaser .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 Phaser License.zip attachment to your computer instead, unzip the file (this will produce a 112dB Mikron Phaser 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.

U N I N S T A L L I N G

The uninstaller for Mikron Phaser can be found here:

Mac: /Applications/112dB/Mikron Phaser

Windows: \Program Files\112dB\Mikron Phaser

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

I N S T A L L A T I O N L O C A T I O N S

Factory presets:

Mac: /Library/Application Support /112dB/Mikron Phaser

Windows: \Program Data\112dB\112dB\Mikron Phaser

User presets:

Mac: /Documents/112dB/Mikron Phaser/User Presets

Windows: \Documents\112dB\Mikron Phaser\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

M A N U A L

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

<https://www.112db.com/plugins/mikron/phaser/help/Manual.pdf>

BASICS

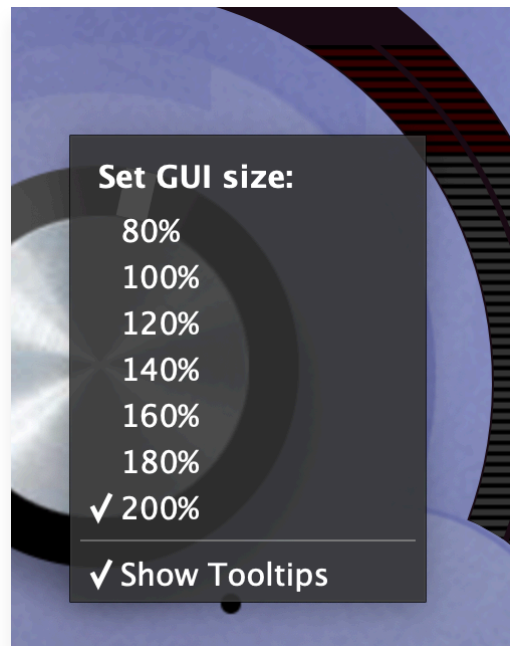
The Mikron Phaser user interface has been designed to be as intuitive and easy to operate as possible. There are functions that might not be immediately obvious, however, and could use some explanation.:

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 its 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.

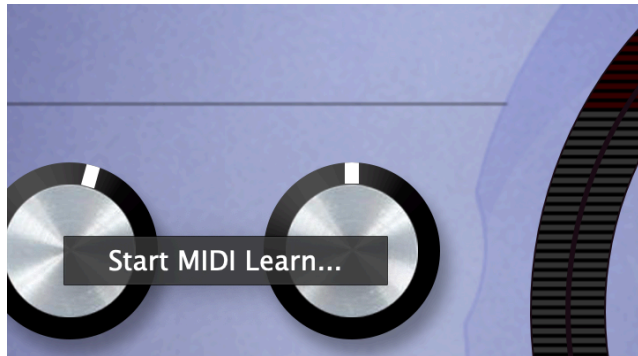
FINETUNE

Cmd-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 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'



PRESETS

Mikron Phaser 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 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 your 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 Phaser 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 Phaser

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 .

THE KNOBS

To understand what the knobs of Mikron Phaser do, it is useful to know a little about how a phaser, or phase shifter, works. A phaser is an effect that modulates a notch filter: a filter with a notch, a 'hole', on a certain range of frequencies. Sounds that fall within this frequency range will be filtered out. Mikron Phaser's filter has two of those notches. When you modulate the filter with an LFO, the notches will move, and give you a whooshing, sweeping effect. .



RATE (0 - 6.660 Hz)

Sets the speed of the LFO. This determines the rate with which the notch filters will be modulated. If you set the LFO rate to zero, there will be no movement in the sound at all. A rate of 6.660 Hz will give you an ultrafast fluttering sound.

PHASE (-0.5 - +0.5)

Sets the degrees that the LFO's will be out of phase. Mikron Phaser contains one LFO that outputs twice. This will give you two different notches at the left and at the right. If you set those out of phase, the effect is that the notches at the left and at the right will be following each other.



CENTER (24-120)

Sets the center frequency of the notch in midi pitch (midi pitch 24 to 120 equals C1 to A9 > see the table on page 14). In other words: when you set the center to 60 (C4) and the depth to 12 the notch will go from C3 to C5. When you set the center to 24 and the depth to 48 only the tones that are below midi pitch 24 will be filtered out, tones that you cannot hear.

DEPTH (0 - 48)

Determines how much the pitch will be modulated up or down in semitones. Since one octave consists of 12 semitones, this means the modulation range of Mikron Phaser is 4 octaves times 2 = 8 octaves.





TONE (0-1)

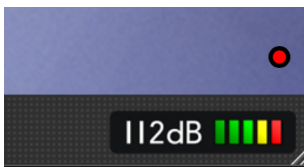
Changes the character of the phaser by changing the depth (the intensity) of the notches. This mimics the behavior of the 'color' knob of the Stone Phaser that Mikron Phaser was inspired on. 0 is off (this is equivalent to turning the effect off), 1 is maximum intensity.

TREBLE (-12dB - +12dB)

Gives you more or less high. .

BASS (-12dB - +12dB)

Gives you more or less low.



ON/OFF

Gives you an easy way to bypass Mikron Phaser. When the light is on, the effect is applied to the signal. When it is off, the effect is disabled.

midi	piano		Hz
11	C	0	15.4
12	Cis/Des	0	16.4
13	D	0	17.3
14	Dis /Es	0	18.4
15	E	0	19.4
16	F	0	20.6
18	Fis/Ges	0	23.1
19	G	0	24.5
20	Gis/As	0	26
21	A	0	27.5
22	Ais/Bes	0	29.1
23	B	0	30.9
24	C	1	32.7
25	Cis/Des	1	34.6
26	D	1	36.7
27	Dis /Es	1	38.9
28	E	1	41.2
29	F	1	43.7
30	Fis/Ges	1	46.2
31	G	1	49
32	Gis/As	1	51.9
33	A	1	55
34	Ais/Bes	1	58.3
35	B	1	61.7
36	C	2	65.4
37	Cis/Des	2	69.3
38	D	2	73.4
39	Dis /Es	2	77.8
40	E	2	82.4
41	F	2	87.3
42	Fis/Ges	2	92.5
43	G	2	98
44	Gis/As	2	103.8
45	A	2	110
46	Ais/Bes	2	116.5
47	B	2	123.5
48	C	3	130.8
49	Cis/Des	3	138.6
50	D	3	146.8

midi	piano		Hz
51	Dis/Es	3	155.6
52	E	3	164.8
53	F	3	174.6
54	Fis/Ges	3	185
55	G	3	196
56	Gis/As	3	207.7
57	A	3	220
58	Ais/Bes	3	233.1
59	B	3	246.9
60	C	4	261.6
61	Cis/Des	4	277.2
62	D	4	293.7
63	Dis /Es	4	311.1
64	E	4	329.6
65	F	4	349.2
66	Fis/Ges	4	370
67	G	4	392
68	Gis/As	4	415.3
69	A	4	440
70	Ais/Bes	4	466.2
71	B	4	493.9
72	C	5	523.3
73	Cis/Des	5	554.4
74	D	5	587.3
75	Dis /Es	5	622.3
76	E	5	659.3
77	F	5	698.5
78	Fis/Ges	5	740
79	G	5	784
80	Gis/As	5	830.6
81	A	5	880
82	Ais/Bes	5	932.3
83	B	5	987.8
84	C	6	1046.5
85	Cis/Des	6	1108.7
86	D	6	1174.7
87	Dis /Es	6	1244.5
88	E	6	1318.5
89	F	6	1396.9

midi	piano		Hz
90	Fis/Ges	6	1480
91	G	6	1568
92	Gis/As	6	1661.2
93	A	6	1760
94	Ais/Bes	6	1864.7
95	B	6	1975.5
96	C	7	2093
97	Cis/Des	7	2217.5
98	D	7	2349.3
99	Dis /Es	7	2489
100	E	7	2637
101	F	7	2793.8
102	Fis/Ges	7	2960
103	G	7	3136
104	Gis/As	7	3322.4
105	A	7	3520
106	Ais/Bes	7	3729.3
107	B	7	3951.1
108	C	8	4186
109	Cis/Des	8	4434.9
110	D	8	4698.6
111	Dis /Es	8	4978
112	E	8	5274
113	F	8	5587.7
114	Fis/Ges	8	5919.9
115	G	8	6271.9
116	Gis/As	8	6644.9
117	A	8	7040
118	Ais/Bes	8	7458.6
119	B	8	7902.1
120	C	9	8372
121	Cis/Des	9	8869.8
122	D	9	9397.3
123	Dis /Es	9	9956.1
124	E	9	10548.1
125	F	9	11175.3
126	Fis/Ges	9	11839.8
127	G	9	12543.9

SYSTEM REQUIREMENTS

OPERATING SYSTEM

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

HOSTS

Mikron Phaser 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/delay

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

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112dB team: Anouschka Busch, Klaus Voltmer, Martijn Zwartjes.

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Special shouts to our dedicated beta testers