

Speakers

User Guide

v1.3

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Speakers

Microphone and Speaker Simulations

Speakers is a plugin effect designed to emulate a wide range of **loudspeakers** and **microphones** using our state-of-the-art convolution engine.

Shape any sound like it's being played by an old telephone, radio, or classic cabinet; or shape it like it's being recorded by a vintage ribbon microphone or even a toy recorder.

Speakers features a freely configurable effects chain, comprising compression, distortion, and filtering, as well as an array of looping background noises for setting the sound in a variety of environments.

Speakers is a zero-latency* post-production dream plugin. No iLok or any other dongle required!

Speakers is available for macOS, Windows, and Linux (VST, VST3, AU, AAX, CLAP), and also as AUv3 and Standalone on the App Store.

** Speakers features our state-of-the-art convolution engine with zero latency. However, some degradation algorithms will introduce some latency (based on the FFT size parameter or other parameters).*

Installation

macOS

- Double click on the DMG archive to extract it
- Right click on the PKG installer and click open
- Follow the instructions to install the plug-in(s)

Windows

- Extract the ZIP archive
- Double click on the setup file (.exe)
- Follow the instructions to install the plug-in(s)

Linux

- Extract the tarball archive
- Run `./install.sh`
- Follow the instructions to install the plug-in(s)

Registration

You can open the registration window by clicking on the icon ☰ next to the bypass button, in the top-right corner.

Online

- If you haven't created an account yet, you can [sign up here](#)
- Just input your credentials into the text fields and click on Log In.



The screenshot shows a dialog box titled "Log in to authorize" with a flask icon at the top. It contains two input fields: "Email" with an envelope icon and "Password" with a key icon. Below these is a radio button labeled "Remember me". At the bottom is a "Log In" button, and below that are two links: "Forgot Your Pass?" and "Sign Up".

Offline

- Download the license file from your [account](#).
- Just drag and drop the license into the registration window or click on the *Load License File* button and browse to the downloaded license.



The screenshot shows a dialog box titled "Offline activation" with a flask icon at the top. It contains the text "Drop the license file here" followed by "or". Below this is a button labeled "Load License File".

Parameters

Microphone / Speaker

<i>Pitch</i>	Changes the pitch of the impulse response
<i>Echo</i>	Controls the time of the impulse response echo
<i>Feedback</i>	Controls the feedback of the impulse response echo
<i>Balance</i>	Controls the balance/pan of the wet signal
<i>Mix</i>	Controls the mix between dry and wet signal
<i>Output</i>	Controls the amount of output gain
<i>Phase</i>	Inverts the phase of the signal, it can useful to avoid phasing issues

Distortion / Degradation

<i>Type</i>	Selects between the different types of distortion or degradation algorithms: Carbon Mic, Classic, Diode Clipper, Foldover, Soft Drive, Tape, Valve, Bit Crusher, Clicks, Drops, GSM, Interference, Quantization, Radio Gate, Robotization, Telecom, VoIP, Warble
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The controls in this section change depending on the selected algortihm

<i>Amount</i>	Controls the amount of effect to apply
<i>Gain</i>	Controls the output gain of the effect
<i>Bits</i>	Reduces the bit-depth of the sound causing distortion
<i>Downsample</i>	Reduces the samplerate frequency causing aliasing
<i>Rate</i>	Controls the rate of the modulation effect
<i>Errors</i>	Controls the amount of simulated errors in the effect
<i>FFT Size</i>	Changes the FFT size of the algorithm, this affects the timbre of the sound and the reported latency
<i>Pre Emphasis</i>	Controls the amount of pre emphasis filtering in the <i>Tape</i> algorithm
<i>Smoothness</i>	Controls the release amount of the <i>Radio Gate</i> algorithm
<i>Tone</i>	Controls the internal lowpass filter in the <i>Valve</i> algorithm

Compressor

<i>Envelope</i>	Controls the speed response of the compression
<i>Amount</i>	Controls the amount of compression to apply to the signal

Filter

<i>Type</i>	Selects between LowPass, HighPass, BandPass, and Notch
<i>Cutoff</i>	Controls the frequency cutoff of the filter
<i>Resonance</i>	Controls the amount of resonance of the filter

Background Noise

<i>Type</i>	Selects between the different types of background noises
<i>Pitch</i>	Controls the pitch/speed of the noise
<i>Balance</i>	Controls the balance/pan of the noise
<i>Level</i>	Controls the output volume of the noise
<i>Envelope</i>	<ul style="list-style-type: none">- the envelope reduces the noise with the input signal<i>off</i> the envelope is disabled+ the envelope increases the noise with the input signal

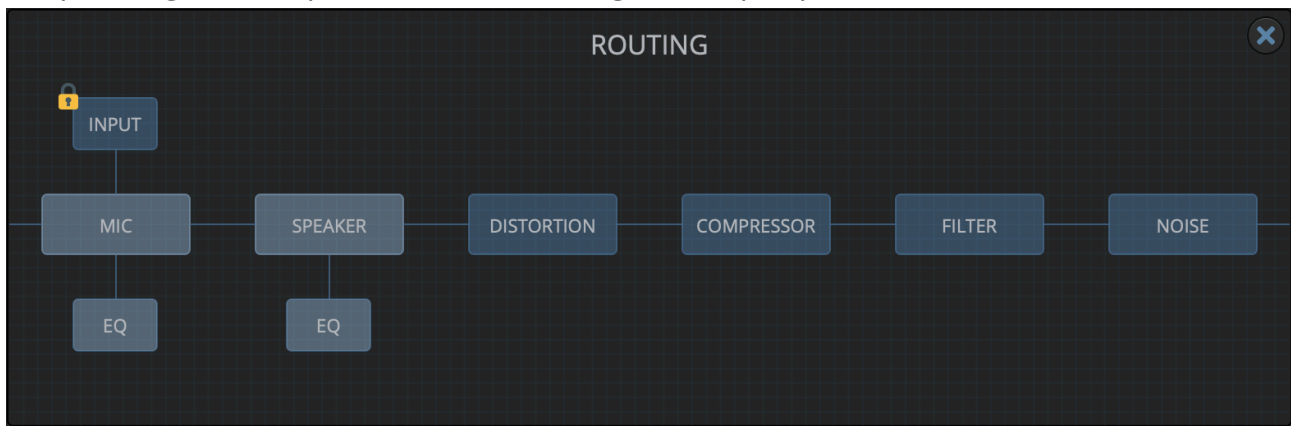
By clicking on the Wrench Tool icon you can access the Attack and Release controls for the envelope.

Master

<i>Routing</i>	Preview the current signal flow and shows the routing window
<i>Input</i>	Controls the amount of gain to apply to the input (-24dB, +24dB)
<i>Soft Clip</i>	Applies a soft clip curve to the wet signal
<i>Dry</i>	Controls the amount of dry signal
<i>Wet</i>	Controls the amount of wet signal

Routing

Speakers features a very flexible routing page: each module can be rearranged with a simple drag and drop. You can also change the Input position when it's not locked.




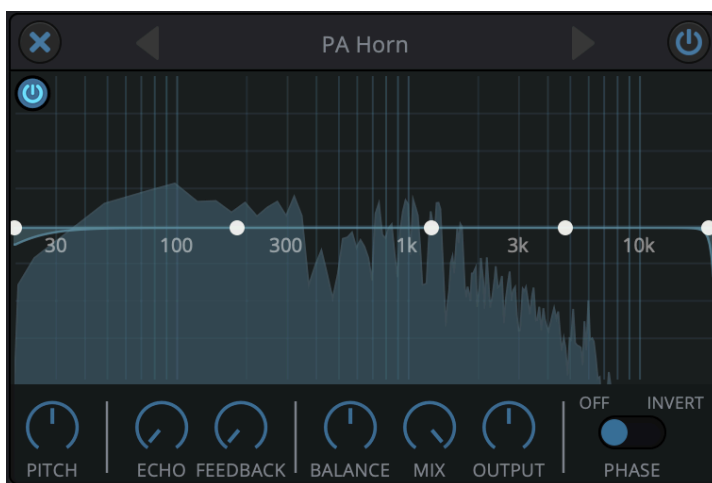
Rearrange the modules with a simple drag and drop

Disable a module with CMD or CTRL + Click

Change the Input position, make sure the lock is open by clicking on it

Equalizers

To further sculpt the sound, both the Speaker and Microphone sections feature a 5-band EQ. To open the EQ, click on the wrench tool  icon. Double click on each band (dot) to reset the band.

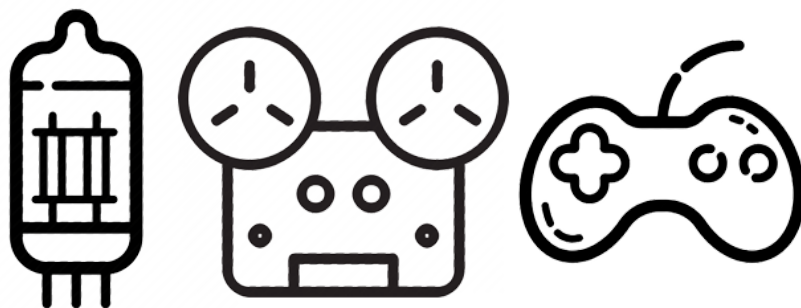


Distortion / Degradation

Speakers features all kind of distortion and degradation algorithms for post-production.

Distortion: Carbon Mic, Classic Drive, Diode Clipper, Foldover, Soft Drive, Tape, Valve.

Degradation: Bit Crusher, Clicks, Drops, GSM, Interference, Quantization, Radio Gate, Robotization, Telecom, VoIP, Warble.



Background Noise

Speakers features a selection of background noises divided into 4 categories: Devices, Places, Organics, Noises.

You can also easily add your own if you want. Click on the drop-down menu and choose "Open noise folder". Every subfolder will be treated as a separate category. You need to reload the plugin to see the new samples in Speakers.

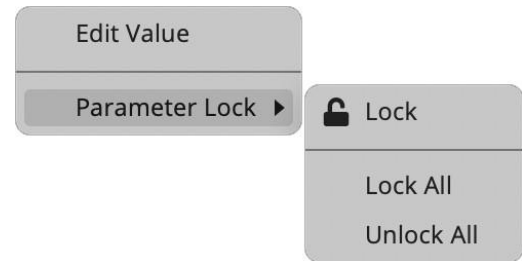
You can also drag and drop samples into the Background Noise section and they will be saved into a User folder.

Features

Parameter Lock

If you want to keep the value of one or more parameters while changing presets, or when using the randomizer button, you can use the *Parameter Lock* feature.

Right-click on a parameter and choose *Parameter Lock*.

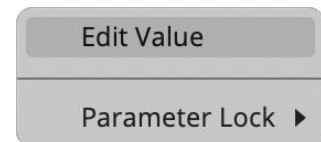


<i>Lock / Unlock</i>	If locked, the parameter won't be updated when changing presets
<i>Lock All</i>	Locks all parameters
<i>Unlock All</i>	Unlocks all parameters

Edit Value

You can also manually adjust the value for knobs and sliders.

Right-click on a parameter and choose *Edit Value*. You can also access this feature with SHIFT + Click.



By clicking on the icon ≡ you can access additional features.

Use Mix Control

When enabled, the Dry and Wet controls are replaced by a single Mix control.

This option is global and will affect all instances of Speakers.

Load Models in Audio Thread

When enabled, Mic and Speaker models are loaded from the audio thread instead of a separate background thread. While increasing the CPU usage, this option can potentially fix issues with offline rendering.

Window Size

You can resize the plugin window using three predefined sizes (*small, standard, big*).

You can also resize the plugin window by clicking and dragging the bottom-right corner of the interface. Double-clicking will reset to the standard size.

Preset Copy / Paste

You can easily share presets by using this Copy/Paste feature.

Copy to Clipboard The status of all parameters will be saved to the Clipboard

Paste from Clipboard Load a preset from the Clipboard

Snapshot

The Snapshot feature allows you to save the current state of the plugin into one of the available slots. These snapshots are stored within the DAW session and each instance of the plugin has its own independent set of snapshots.

You can automate snapshot changes directly through the Snapshot parameter in your DAW, allowing for seamless transitions between saved states.

Enable / Disable Notifications

You can enable or disable the notifications for updates and news (shown by the bell icon). This option is global and it will affect all AudioThing plugins.

Swap Mouse Buttons

If you are using the right button as your primary mouse button, the plugin might not recognize it. Use this option to enable it internally in the plugin.

This option is global and it will affect all AudioThing plugins.

GUI Acceleration

You can enable or disable the GUI acceleration supported by your system.

The current and default library is OpenGL.

End

Where is everything?

The installer will place the plugins, presets, and other data in these folders.

macOS

AU /Library/Audio/Plug-ins/Components/
VST /Library/Audio/Plug-ins/VST/
VST3 /Library/Audio/Plug-ins/VST3/
CLAP /Library/Audio/Plug-ins/CLAP/
AAX /Library/Application Support/Avid/Audio/Plug-Ins/
Data /Users/Shared/AudioThing/

Windows

VST *custom path from installer*
VST3 \Program Files\Common Files\VST3\
CLAP \Program Files\Common Files\CLAP\
AAX \Program Files\Common Files\Avid\Audio\Plug-Ins\
Data \Users\Public\Public Documents\AudioThing\

Linux

VST ~/.vst/
VST3 ~/.vst3/
CLAP ~/.clap/
Data ~/.local/share/AudioThing/

Credits

DSP & Code	<i>Carlo Castellano</i>
VoIP Algorithm	<u>Lese Audio Technologies</u>
Design	<i>John Gordon</i>
Impulses	<i>Emanuele Cioncoloni, Stewart Tavener, Carlo Castellano</i>
QA	<i>Giuseppe Marrazzo</i>

EULA

Please visit www.audiothing.net/eula/ to review this product EULA.

Thank You

Thank you for your purchase! We hope you will have as much fun using it as we had making this product.

For support, please visit www.audiothing.net/support/

For further help or any question, please contact us here: www.audiothing.net/contact/

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