

# SPEAKERS

## USER GUIDE

v1.1

<b>SPEAKERS.....</b>	<b>3</b>
INSTALLATION.....	3
REGISTRATION.....	4
<b>PARAMETERS.....</b>	<b>5</b>
LIST.....	5
ROUTING.....	7
EQUALIZERS.....	7
DISTORTION / DEGRADATION.....	8
BACKGROUND NOISE.....	8
<b>FEATURES.....</b>	<b>9</b>
PARAMETER LOCK.....	9
EDIT VALUE.....	9
USE MIX CONTROL.....	9
LOAD MODELS IN AUDIO THREAD.....	9
WINDOW SIZE.....	9
PRESET COPY/PASTE.....	10
ENABLE/DISABLE NOTIFICATIONS.....	10
SWAP MOUSE BUTTONS.....	10
ENABLE/DISABLE GUI ACCELERATION.....	10
DARK / LIGHT THEME.....	10
<b>END.....</b>	<b>11</b>
WHERE IS EVERYTHING?.....	11
CREDITS.....	11
EULA.....	11
THANK YOU.....	11

# SPEAKERS

[Speakers](#) is a plugin that simulates **speakers** and **microphones** using our state-of-the-art convolution engine.

Shape any sound to give the illusion that 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.

Apply EQ, distortion, compression, filtering, and background noise to your tracks. The signal flow is fully customizable.

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

## Speakers features:

- **50 speakers:** cabinets, devices, phones, radios, speakers, toys
- **32 microphones:** condensers, dynamics, phones, ribbons, and more
- **18 distortion/degradation algorithms:** from carbon mic overdrive to GSM interference
- **42 background noises:** devices, places, organic, and more

## INSTALLATION

### MAC OS

- 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)

## REGISTRATION

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

You can choose between *Online* and *Offline* authorization.

### ONLINE

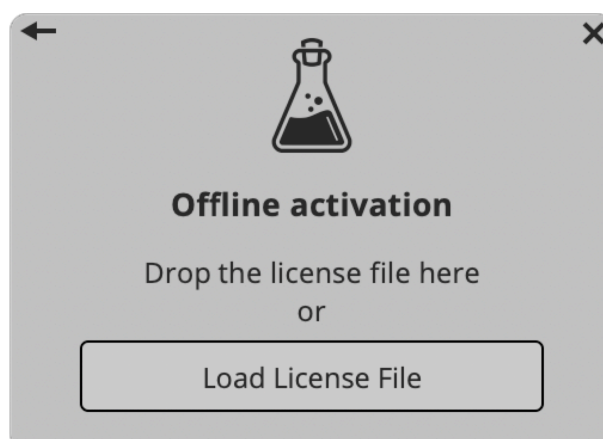
- If you haven't created an account yet, you can [signup here](#) using the same email address used at check out.
- Just input your credentials into the text fields and click on Log In



A screenshot of a login dialog box. At the top is a back arrow on the left and a close 'X' on the right. Below them is an icon of a flask with liquid and bubbles. The title 'Log in to authorize' is centered. Below the title are two input fields: the first has an envelope icon and the label 'Email'; the second has a key icon and the label 'Password'. Below these is a radio button followed by the text 'Remember me'. At the bottom is a large 'Log In' button. Below the button are two links: 'Forgot Your Pass?' on the left and 'Sign Up' on the right.

### OFFLINE

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



A screenshot of an offline activation dialog box. It has a back arrow on the top left and a close 'X' on the top right. In the center is an icon of a flask with liquid and bubbles. Below the icon is the title 'Offline activation'. Underneath the title is the text 'Drop the license file here' followed by 'or' on the next line. At the bottom is a button labeled 'Load License File'.



# PARAMETERS

## LIST

### 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

<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
-------------	--

The controls in this section change depending on the selected algorithm

<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"><li>- the envelope reduces the noise with the input signal</li><li><i>off</i> the envelope is disabled</li><li>+ the envelope increases the noise with the input signal</li></ul>

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

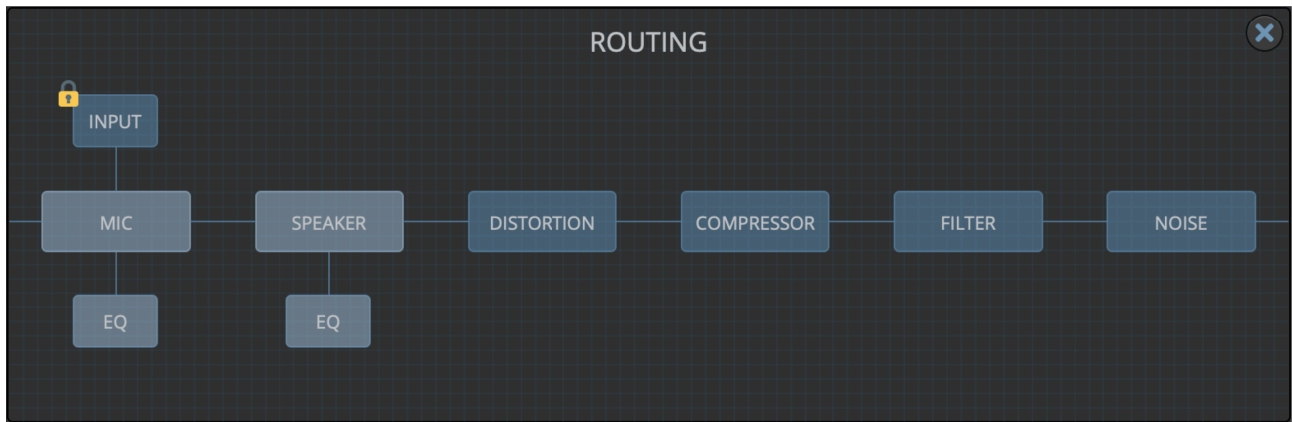
## **Master**

<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.

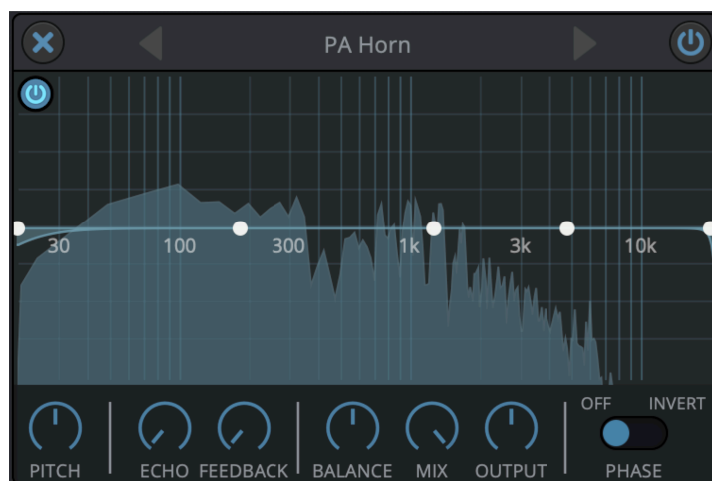


- Rearrange the modules with a simple drag and drop
- Disable a module with CMD or CTRL + Click
- Change the Input position, make sure the lock is open by clicking on it

## 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.

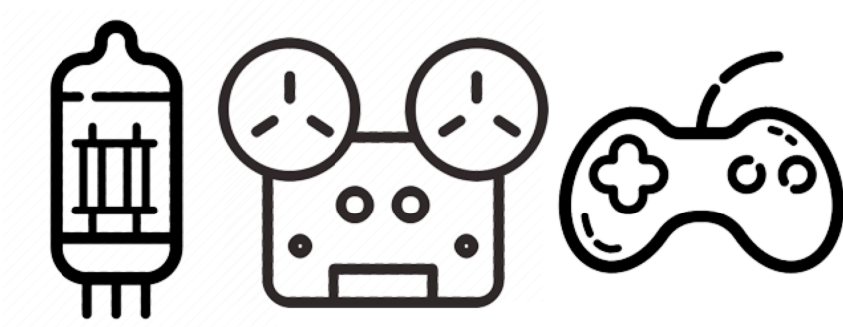


## DISTORTION / DEGRADATION

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.*

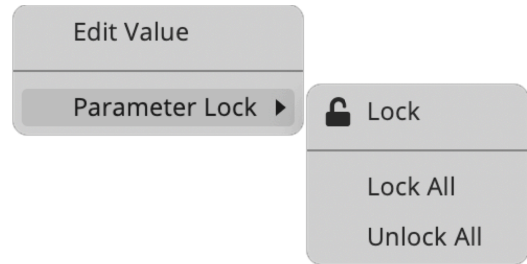
You can also easily add your own if you want. Click on the drop-down menu and choose *“Open noise folder”*. Every subfolder will be treated as a separate category. You need to reload the plugin to see the new samples in Speakers.

# 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*.



*Lock/Unlock*     If locked, the parameter won't be updated when changing presets

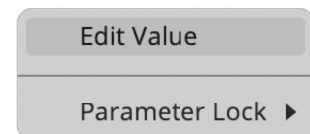
*Lock All*         No parameters will be updated


*Unlock All*       All parameters will be updated

## EDIT VALUE

You can also manually change the value for knobs and sliders. Right click on a parameter and choose *Edit Value*.

You can also access this feature with a 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

## 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.

## ENABLE/DISABLE GUI ACCELERATION

You can enable or disable the GUI acceleration supported by your system. The current and default library is OpenGL.

## DARK / LIGHT THEME

You can choose a dark or light appearance for menus, popup values, and windows. This option is *global* and it will affect all AudioThing plugins.

# END

## WHERE IS EVERYTHING?

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

### MAC OS

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

### WINDOWS

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

## CREDITS

DSP & Code: Carlo Castellano  
Impulses: Emanuele Cioncoloni, Stewart Tavener, Carlo Castellano  
Design: John Gordon (vstyler)  
QA Engineer: Giuseppe Marrazzo

## EULA

Please visit [www.audiothing.net/eula/](http://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 help or any question, feel free to contact us here: [www.audiothing.net/contact/](http://www.audiothing.net/contact/)

