Sound Particles

Density

Reference Manual

November 2022
v 1.1

Welcome Note

Welcome to "Density"

I always liked the idea of having some sort of plugin that could simulate multiple voices - you would feed it with a solo voice or instrument, and in the output, you would get an ensemble. Even the traditional "Chorus" effect tries to accomplish that, using simple DSP techniques. With Density, we tried to create our take on the problem, by mixing different modules of our technologies – particles, granular synthesis, and 3D render. I hope you enjoy it.
And, as always, don't hesitate to send us your feedback – we LOVE to hear from our users!

Nuno Fonseca, PhD
CEO
nuno.fonseca@soundparticles.com
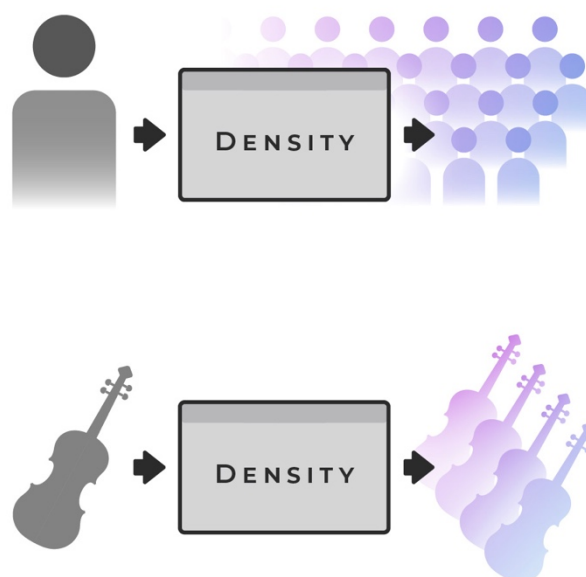
Table of Contents

Density

Thank you very much for downloading Density audio plugin from Sound Particles.

Density is committed to change the way you create wider sounds in your mixes by increasing the density of voices in the sound field. This unique audio plugin uses granular synthesis, applying movement, pitch and timing differences to the grains, creating an "ensemble" effect, like multiple musicians playing together.
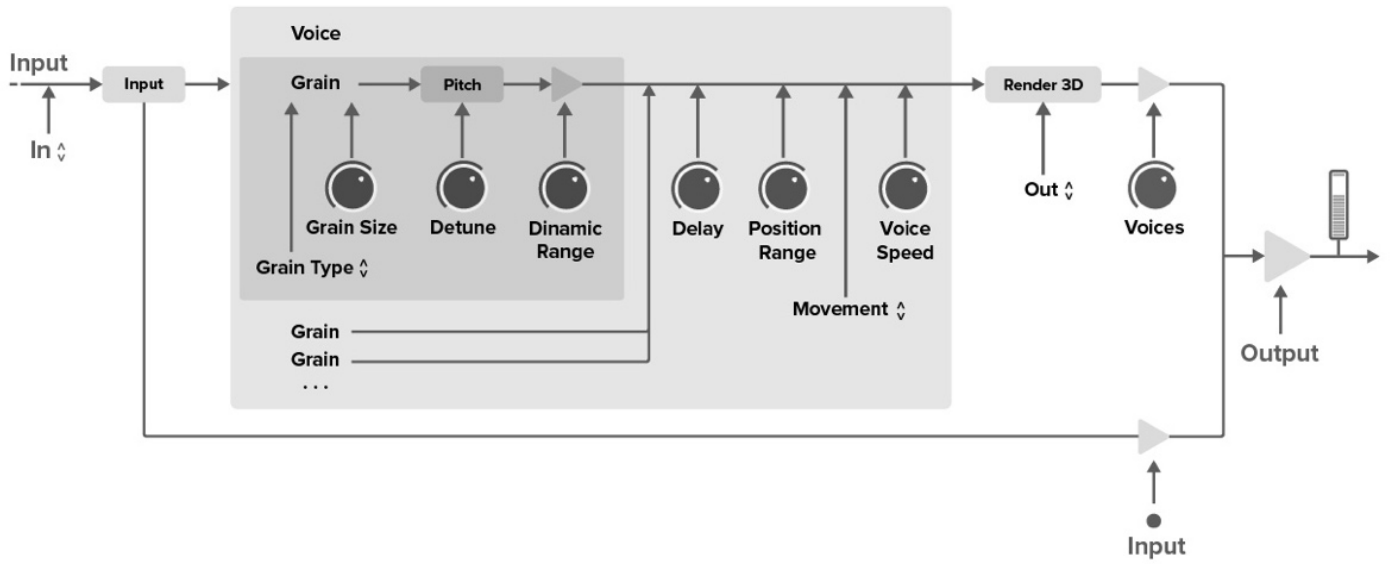
Designed to be simple and quick to use, Density has three different operation modes — Basic, Detune and Multipitch — enabling sound designers and music producers to control it with the level of complexity they desire. Whether to add motion to sound effects or to creatively harmonize with multiple voices, this audio plugin will change the way you think about sound.

Density also allows you to output the sound of the multiple voices in a variety of reproduction formats — from stereo to surround 5.1 and 7.1, to Dolby Atmos 7.1.2, Ambisonics up to 6th order, and Binaural.

Go through this manual and get the best out of Density!

Signal Flow

Input → Input → **Voice** [Grain → Pitch ▶] Grain Size, Detune, Dinamic Range, Grain Type, Grain, Grain, ... → Delay, Position Range, Voice Speed, Movement → Render 3D → Out, Voices → Output ← Input

Overview

Density is designed to be easy-to-use and straightforward while providing all the controls you need to attain the best out of the plugin. There are three modes of operation, with different levels of control and complexity, that can be select on the top of the window:

1) Basic - quick and easy controls for fast results.

2) Detune – custom controls for time, dynamics and the movement of the voices.

**3) Multipitch** – all the previous controls with custom pitch control for different voices groups.

All the three modes will create a defined number of new voices, generated through granular synthesis, that will be moving around in the sound field. With the Detune knob you will be able to control the pitch variation of the created voices and on the Detune and Multipitch modes, you can fine tune the movements of the voices and other parameters such as delay, grain size and dynamic range of the voices.

On the next section of this document, you'll find a detailed description of each mode and its specific controls.

Modes and Controls

One top of the plugin window, you have the **Mode Selection** section for shifting between the three operation modes. This is visible in all modes and allows the user to quickly switch between them. All the common settings are maintained when the mode is changed.
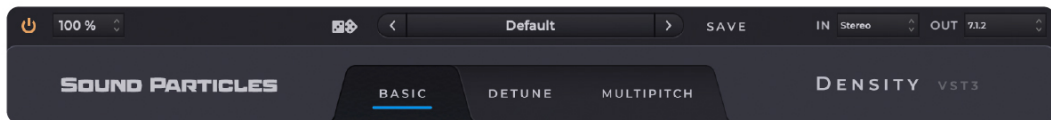
All the three modes allow you to select the input and output formats as well as the input, voices and output level. That will be covered after each mode, in the **Output Options** section of this document.
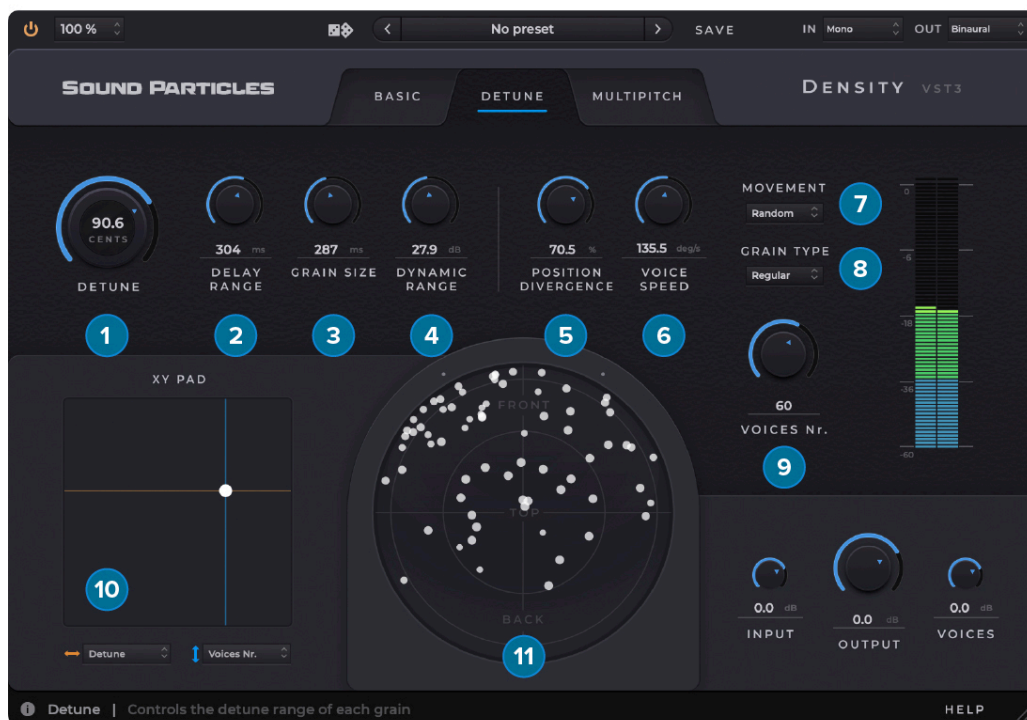
Basic

The Basic mode allows you to use the plugin fast without needing any additional experience. In this mode you will have access to the following parameters:

1) **Small / Large Ensemble** – Defines the number of voices (Small Ensemble will create 4 voices, Large Ensemble will create 16 voices);

2) **Detune** – Controls the detune range with logarithmic behaviour (80% -> increases 1 step / semitone, 100% -> increases 12 steps / semitones = 1 octave);

3) **Add Bass** – Pressing this button will add voices 1 octave bellow (2 voices in Small Ensemble and 6 voices in Large Ensemble).

Detune

The Detune Mode has more advanced controls that allow you to fine tune some parameters related to the generation of grains and the movement of the voices, such as:

1) **Detune** – Controls the detune range of each grain with logarithmic behaviour (80% -> increases 1 step / semitone, 100% -> increases 12 steps / semitones = 1 octave);

2) **Delay Range** – Controls the maximum random delay to be added to voices with logarithmic behaviour (from 0 to 1 second);

3) **Grain Size** – Controls the duration range of each grain with logarithmic behaviour (from 0 to 1 second). Actual value of grain size will range between this value and 75% of this value.

4) **Dynamic Range** – Controls the maximum random attenuation applied to each grain (from 0 to 60 dB);

5) **Position Divergence** – Controls how far voices will be created regarding the original channel position (0% -> the grains are created on the same position as the original channel, 100% -> the grains are created far from the original channel);

6) **Voice Speed** – Controls the movement speed of all voices (from 0 to 1000 deg/s);

7) **Movement** – Pressing this button will open a pop-up menu with different options for the movement types (Random, Clockwise, Counter-Clockwise);

8) **Grain Type** – Pressing this button will open a pop-up menu with different options for the type of grains used (Regular, Reversed, Both);

9) **Voices Nr** – Controls the number of voices (from 0 to 100);

10) **XY Pad** – Controls two chosen parameters in a XY plane (Cartesian coordinate system);

11) **Top View** – Visualize the movement of the voices.

Multipitch

The Multipitch Mode allows the user to control different groups of voices, having individual slots for each group with controls for pitch, number of voices and gain. This mode allows you to experiment with creative effects like harmonizing your original sounds by shifting the pitch of each group from -24 to 24 steps (2 octaves bellow and up).

1) **Detune** – Controls the detune range of each grain with logarithmic behaviour (80% -> increases 1 step / semitone, 100% -> increases 12 steps / semitones = 1 octave);

2) **Delay Range** - Controls the maximum random delay to be added to voices with logarithmic behaviour (from 0 to 1 second);

3) **Grain Size** – Controls the duration range of each grain with logarithmic behaviour (from 0 to 1 second). Actual value of grain size will range between this value and 75% of this value.

4) **Dynamic Range** – Controls the maximum random attenuation applied to each grain (from 0 to 60 dB);

5) **Position Divergence** – Controls how far voices will be created regarding the original channel position (0% -> the grains are created on the same position as the original channel, 100% -> the grains are created far from the original channel);

6) **Voice Speed** – Controls the movement speed of all voices (from 0 to 1000 deg/s);

7) **Movement** – Pressing this button will open a pop-up menu with different options for the movement types (Random, Clockwise, Counter-Clockwise);

8) **Grain Type** – Pressing this button will open a pop-up menu with different options for the type of grains used (Regular, Reversed, Both);

9) **XY Pad** – Controls two chosen parameters in a XY plane (Cartesian coordinate system);

10) **Top View** – Visualize the movement of the voices;

The user can create up to 8 slots of voices groups, each controlling the following parameters:

11) **Pitch** – Controls the pitch of the voices' group (from –24 to 24 steps / semitones);

12) **Voices Nr** – Controls the number of voices created in the group (from 0 to 25 in each slot);

13) **Gain** – Controls the gain of the voices' group (from -inf to 12 dB).

Output Section

Density has an output section dedicated to the parameters that change the already processed audio. These are the parameters:

1) **IN** – Pressing this button will open a pop-up menu with different options for the input format;

2) **OUT** - Pressing this button will open a pop-up menu with different options for the output format;

3) **Input** – Controls the level of the input signal send to the output (dry signal);

4) **Output** – Controls the output level of the plugin.

5) **Voices** – Controls the level of the voices signal send to the output (wet signal).

The current signal levels are visible in the VU meters available on the right-side of the interface. Users can access a pop-up menu by right clicking on the VU's. This essentially allow users to reset the VU's animation (e.g.: if they already clipped), as well as viewing the render format in use. When inserted into a multi-channel track, Density lets you switch the VU's channel order between Film and SMPTE formats.

Input Formats

Mono	**7.0.6**
Stereo	**7.1.6**
LCR	**9.1.4**
LCRS	**9.1.6**
4.0	**9.0.8**
Quad	**9.1.8**
5.0	**11.1.8**
5.1	**11.1**
7.0	**12.0**
7.1	**13.1**
9.0	**22.2**
9.1	**1st Order Ambisonics**
5.0.2	
5.1.2	**2nd Order Ambisonics**
5.0.4	**3rd Order Ambisonics**
5.1.4	
7.0.2	**4th Order Ambisonics**
7.1.2	
7.0.4	**5th Order Ambisonics**
7.1.4	**6th Order Ambisonics**
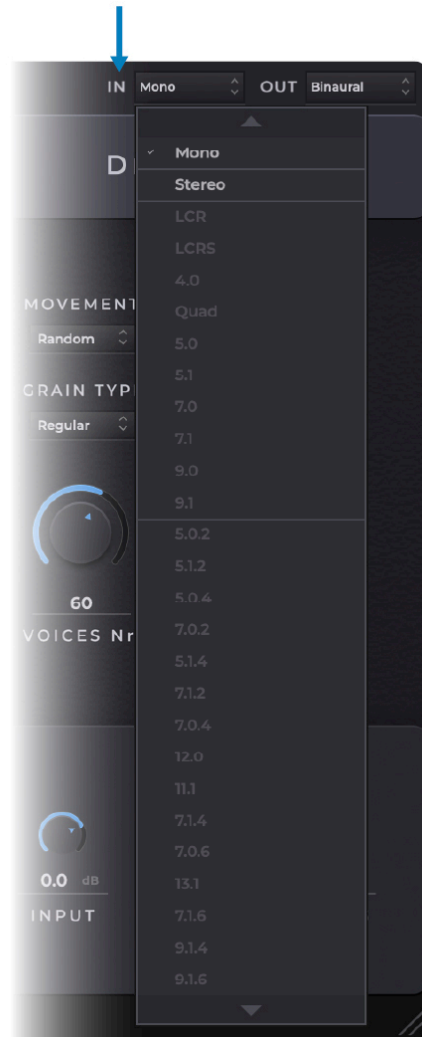
Output Render Formats

Stereo - A stereo render made of gains based on VBAP.

Stereo (XY) - A stereo render made with a virtual XY microphone. Only available as Output format.

Stereo (MS) - A stereo render made with a virtual MS microphone.
Only available as Output format.

Stereo (Blumlein) - A stereo render made with a virtual Blumlein microphone. Only available as Output format.

Binaural - A binaural render based on the SADIE MINP KU100 dataset.
Only available as Output format.

LCR - An LCR VBAP multichannel render.

LCRS - An LCRS VBAP multichannel render.

4.0 - A 4.0 VBAP multichannel render.

Quad - A Quad VBAP multichannel render.

5.0 - A 5.0 VBAP multichannel render

5.1 - A 5.1 VBAP multichannel render.

7.0 - A 7.0 VBAP multichannel render.

7.1 - A 7.1 VBAP multichannel render.

9.0 - A 9.0 VBAP multichannel render.

9.1 - A 9.1 VBAP multichannel render.

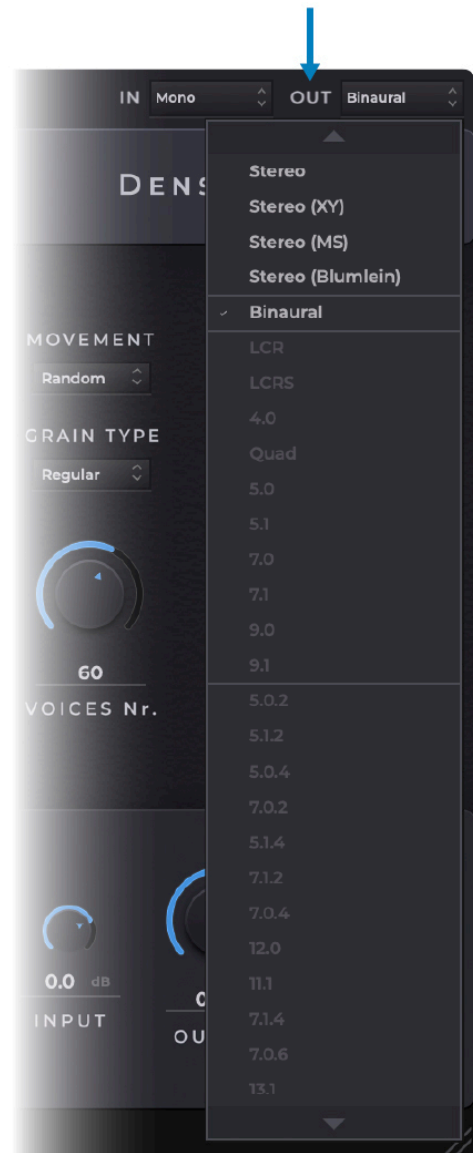**5.0.2** - A 5.0.2 VBAP multichannel render.

5.1.2 - A 5.1.2 VBAP multichannel render.

5.0.4 - A 5.0.4 VBAP multichannel render.

5.1.4 - A 5.1.4 VBAP multichannel render.

7.0.2 - A 7.0.2 VBAP multichannel render.

7.1.2 - A 7.1.2 VBAP multichannel render.

7.0.4 - A 7.0.4 VBAP multichannel render.

7.1.4 - A 7.1.4 VBAP multichannel render.

7.0.6 - A 7.0.6 VBAP multichannel render.

7.1.6 - A 7.1.6 VBAP multichannel render.

9.1.4 - A 9.1.4 VBAP multichannel render.

9.1.6 - A 9.1.6 VBAP multichannel render.

9.0.8 - A 9.0.8 VBAP multichannel render.

9.1.8 - A 9.1.8 VBAP multichannel render.

11.1.8 - A 11.1.8 VBAP multichannel render.

11.1 - A 11.1 Auro-3D VBAP multichannel render.

12.0 - A 12.0 IMAX VBAP multichannel render.

**13.1** - A 13.1 Auro-3D VBAP multichannel render.

22.2 - A 22.2 NHK VBAP multichannel render.

Ambisonics (ACN/SN3D) - An Ambisonics render up to 6th order based on the Ambisonics input.

Toolbars

The Density toolbar incorporates a set of features that assist you while using the plugin. The upper tab allows you to save and manage presets very quickly and intuitively. Additionally, the Smooth Bypass, Scaling and Randomize features will help you improve the experience with the plugin.

The bottom tab gives you access to all the help you need, with dynamic tooltips.
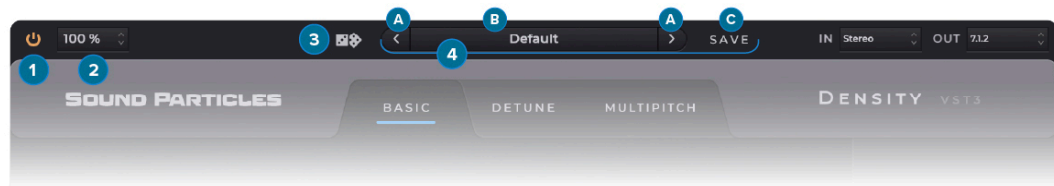
1) **Smooth Bypass** — noiseless plug-in activation/deactivation. Using this feature the Density is bypassed without any clipping, even if it's processing audio.

2) **GUI Zoom —** the Density GUI can be resized. The pop-up available in the upper-left part of the interface let users choose a scaling value, from 25% to 400%. This action affects only the currently selected Density instance. New instances of the plugin will open with the default size factor (100%).

3) **Randomize —** This button will set new random positions for the sound sources

4) **Internal Preset Saving System —** The internal system for saving presets is a feature that allows the management of presets, enabling users to: create snapshots, alter presets, and access all of them (factory and custom) across all DAWs. The plugin also supports a tree structure for better organisation of presets, allowing users to save presets within specific folders.

   A. **Preset Navigator —** allows users to navigate through the previous and next preset using the arrows placed on the left and right of the Preset pop-up menu.

   B. **Preset Pop-up Menu** — the preset pop-up displays the current preset in use. It initially appears with a preset called Default, used whenever the plugin is inserted into a track. Clicking the name of the preset brings up a menu with the options: **Delete preset**, **Set as default preset**, and **Refresh preset list** — followed by the complete list of presets (factory and custom).

B1. Set as default preset — defines the current plugin settings as the default settings when the plugin is inserted into a new track. This action determines the default on all hosts and architectures.
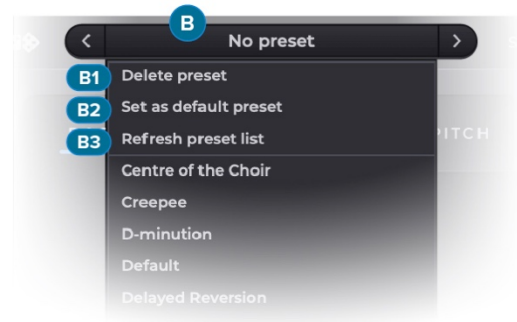
B2. Refresh preset list — updates the presets list. If there is a new preset file in the presets folder, or a new preset has been created from a different Density instance, this option updates the preset list.

B3. Delete preset — deletes the current preset. This action is permanent and deletes the preset on all hosts.

C. Save — Clicking the "Save" button saves the current state of Density parameters. An Operating System window will automatically appear in the required directory. Presets saved in different paths won't be recognised in the preset menu of the plugin.

5) **Tooltips' section** — Shows the definition for an element of the plugin when the parameter is hovered.

6) **Update** — If the plug-in is running on a computer with Internet access, it can detect if a newer update is available, informing the user of the existence of a new update, by showing a blinking phrase on the top of the display.

7) **Help button** — displays the Help menu that gives access to our Website, User Manual, Tutorials, Support Requests, Forum and Check for Updates.

8) **Resize button** — Users are allowed to use a custom scaling factor by dragging the cursor in the bottom-right of the plugin's interface. Performing this makes the zoom pop-up display the custom value of the scaling. *Bare in mind that hosts may deal differently with plugin resizes.*

a. **Visit our Website** – Link to soundparticles.com

b. **Watch Tutorials** – Link to Density tutorials

c. **Read Manual** – Web version of this Manual.

d. **Request Support** – This button will redirect users to the requested support page. This will automatically retrieve some data about your setup (OS, CPU, RAM, plugin version and host). Note that this request support is particular for Density topics.

e. **Forum** – Link to our main Facebook group, Sound Particles Forum.

f. **Check for Updates** - Pressing this button will access soundparticles.com to check if there are available updates.
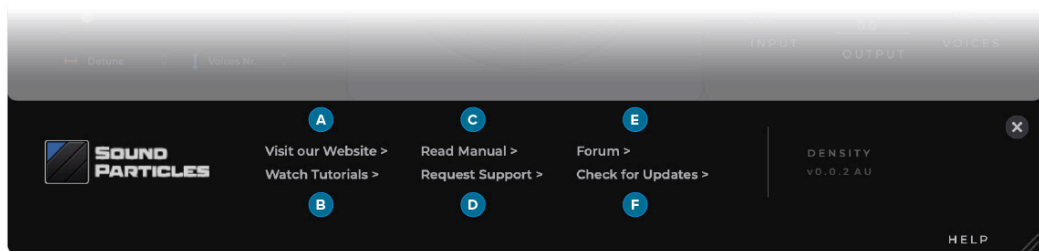
Plugin Installation

Installing Density copies the plugin into appropriate plugin folders, and the hosts will automatically recognize them. It also allows Density users to choose a custom folder for the installation, in both operating systems — MacOS and WindowsOS.

On MacOS, the default paths for Density plugin architectures are the following:

- /Library/Audio/Plug-Ins/VST3
- /Library/Audio/Plug-Ins/Components
- /Library/Application Support/Sound Particles/Density
- /Library/Application Support/Avid/Audio/Plug-Ins

On WindowsOS, the default paths for Density plugin architectures are the following:

- C:\Program Files\Common Files\VST3
- C:\Program Files\Common Files\Avid\Audio\Plug-Ins

Presets locations

User presets should be stored in a .spp file in the following locations:

On MacOS, the path for Density User presets is the following:

- /Users/USERNAME*/Library/Application Support/Sound Particles/Density/Presets

On WindowsOS, the path for Density User presets is the following:

- C:\Users\USERNAME**\AppData\Roaming\Sound Particles\Density\Presets

*USERNAME is your login name. Your user Library folder may be hidden, in which case you can select the "Go To Folder" option in the Go menu of the Finder, enter "~/Library", and click OK.
**USERNAME is your login name. AppData may be hidden; use the explorer view options to show system files.

Tips

Knobs:

- Double click or Option/Alt-click resets to the default value;
- Command, Ctrl or Shift while dragging enables fine-tune.

VU meter:

- Click on any channel clears all clipping LEDs;
- Left click on any channel and select "reset" clears all clipping LEDs;
- In multichannel scenarios it is possible to choose the VU's channel order (SMPTE/Film) with a mouse right-click inside the VU's area.
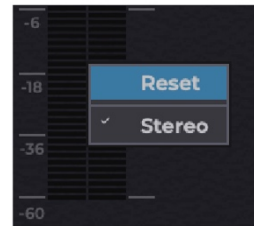
Randomize:

- This button will set new random values to the parameters and the plugin effect mode buttons/pop-ups.
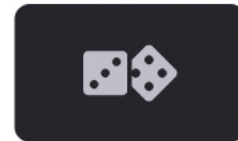
Tooltip's bar:

- This version of Density has a bar at the bottom of the interface that shows short definitions for each element of the plugin.

Additional Notes

Avid S6 Support

Density (AAX) can have its parameters controlled through various control surfaces, including AVID S6.

Check for updates

If the plug-in is running on a computer with internet access, it is able to detect if a newer update is available, informing the user of the existence of a new update, by showing a blinking phrase on the top of the display.

To achieve that, Sound Particles Density plugin tries to access a simple XML file located at https://www.soundparticles.com.

SOUND PARTICLES DENSITY DOES NOT SEND ANY INFORMATION FROM THE USER OVER THE INTERNET.

Support

If you detect a bug, if you got a crash, if you believe something is not perfect, or even if you have ideas for future versions, don't hesitate, and email us at support@soundparticles.com. We REALLY want to hear from you. Sometimes a bug lives on for too much time, simply because we haven't detected ourselves and we didn't receive any feedback from the affected users. Besides that, your feedback is very important for us.

"Help us help you"

Credits

Produced by

Nuno Fonseca

Developer

Guilherme Krull

QA and Testers

João Dionisio, João Franco, Luís Rodrigues e Salvador Miranda

Graphic Designer

Marco Afonso

EULA

END USER LICENSE AGREEMENT OF SOUND PARTICLES – JANUARY 2020

I. GENERAL

The following End User License Agreement ("EULA") represents an agreement between you ("Licensee") and "Sound Particles, S.A.", with head office at IDD, Rua da Carvalha, 570, 2400-441 Leiria, Portugal (hereinafter "Sound Particles") for the use of software including related media documentation (for example, program descriptions and manuals) and other documents and materials manufactured by Sound Particles (the "Product(s)").

By installing the software on your computer, you declare yourself in agreement with these conditions. If you do not agree with these conditions, you must not install the software or use it.

II. SCOPE OF USE

The Products are intellectual property of Sound Particles and are protected by law. Licensee, as purchaser of the Products, acquires only a limited, non-exclusive and non-transferable license to use, personally or professionally, the Products. Any other use or exploitation not explicitly granted to Licensee in this EULA shall not be allowed without prior written consent from Sound Particles. Specifically, Licensee is not entitled to copy, decompile, reverse engineer the Product or parts thereof, create derivative works from the Products or sublicense or provide the Products as "software as a service".

Licensee must ensure by appropriate and reasonable steps that third parties, including its own employees, cannot make unauthorized use of the Product. Licensee shall be liable to Sound Particles for any loss or damage in this context.

The Software is being licensed to you and you hereby acknowledge that no title or ownership in the Software is being transferred or assigned and this EULA is not to be construed as a sale of any rights in the Software. Sound Particles retains all right, title and interest in the Products, including, but not limited to, all copyrights, trademarks, trade secrets, trade names, proprietary rights, patents, titles, computer codes, audiovisual effects, themes, settings, artwork, sound effects, musical works, and moral rights whether registered or not and all applications thereof.

1. Sound Particles grants Licensee the non-exclusive right without restrictions in time or place to use the Products. Sound Particles is not obliged to disclose the Products' software underlying source code, including the associated development documentation.

2. Licensee may either:

a) Install and use the licensed Products' software on several devices (e.g. one laptop, one desktop), provided that the said software is used only by the same single person - Per user licensing. Simultaneous use on more than one hardware device is not permitted.

b) Install the licensed Products' software on a single device, allowing its use by several users on the device (e.g. studio computer) - Per seat licensing.

3. Licensee may copy the licensed Products' software, only if such reproduction is necessary for the contractually agreed use. Licensee is authorized to create a backup, only if this is necessary to secure the future use.

4. Licensee is not authorized to modify the Products' software.

5. Licensee shall not attempt to develop any software that contains the "look and feel" of any of the Products' or is otherwise derivative of its software.

6. Third Parties

a) Renting or lending the licensed Products' software to a third party is expressly forbidden. Apart from that and if not provided otherwise within this EULA, Licensee may leave the software to a third party for a certain amount of time, if the third party agrees to the terms of this EULA and Licensee does not use the software during this period.

b) Except if otherwise stated within this EULA, Licensee may resell the software to a third party or transfer the software permanently free of charge, provided the third party agrees in writing with this EULA and Licensee ceases all use of the software, completely removes all installed copies of the software from its computer and – if the software was not purchased via download – deletes or transfers the original data storage to the third party (if Licensee is not obliged to a longer storage by law). In addition, Licensee is required to de-register the purchased software with Sound Particles. Following respective request from Licensee via its email address registered with Sound Particles, the serial number of the Product will be transferred by Sound Particles to the third party, and at the same time the registration of Licensee for the Product purchased will be deleted.

c) Licensee may not (i) distribute, lease, license, sell, rent, lend, convey or otherwise transfer or assign the Products or any copies thereof, (ii) make publicly available or available on a network for use or download by multiple users, (iii) remove, obscure or modify any copyright, trademark or other proprietary rights notices, marks or labels contained on or within the Products, falsify or delete any author attributions, legal notices or other labels of the origin or source of the material

7. In addition, for certain Products from Sound Particles the following shall apply:

a) Bundles (product bundles consisting of hardware and software or software-only bundles) can only be resold / transferred as a whole. The individual components of a bundle must not be resold / transferred separately.

b) Any Products from Sound Particles labeled or otherwise provided to you as "NFR" (Not For Resale) shall only be used for demonstration, testing and evaluation purposes. NFR Products must not be used for commercial purposes, and must not be resold or transferred. NFR Products are exempt from update, upgrade or crossgrade offers and cannot be purchased with or exchanged for vouchers or coupons.

c) Any Products from Sound Particles labeled or otherwise provided to you as an EDU (Educational) version shall only be used by students or those working in educational institutions. This definition includes students, faculty, staff and administration attending and / or working at an educational institutional facility: private / public schools, training facilities, colleges, universities and similar. EDU Products must not be used for commercial purposes, and must not be resold or transferred. EDU Products are exempt from update, upgrade or crossgrade offers, and cannot be purchased with or exchanged for vouchers or coupons.

d) Any Products from Sound Particles labeled or otherwise provided to you as "Demo Versions" or similar, shall only be used for demonstration, testing and evaluation purposes. Demo Versions must not be used for commercial or public purposes, and must not be resold or transferred.

If you are not sure which license type you own – (FULL / NFR / EDU) – please contact our Support Team.

III. THIRD PARTY RIGHTS

Some content included in Sound Particles software Products, as well as any associated intellectual property rights and titles, belongs to third parties. This content may be protected by copyright or other intellectual property laws and treaties and may be subject to terms and conditions from the third party providing the content.

FFmpeg Notice - The Software utilizes the FFmpeg video application and its included libraries. FFmpeg is a trademark of Fabrice Bellard (originator of the FFmpeg project - FFmpeg project, http://www.ffmpeg.org) licensed under the GNU Lesser General Public License 3.0 and its source can be downloaded here.

IV. DUTIES TO PROTECT

Copyright notices, serial numbers and other identification features of the program may not be removed from the software or altered in any way.

V. WARRANTY, LEGAL LIABILITY, DAMAGES

DISCLAIMER OF WARRANTIES: YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT USE OF THE SOFTWARE IS AT YOUR SOLE RISK AND THAT THE ENTIRE RISK AS TO SATISFACTORY QUALITY, PERFORMANCE, AND ACCURACY IS WITH YOU. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE SOFTWARE IS PROVIDED "AS IS," WITH ALL FAULTS AND WITHOUT WARRANTY OF ANY KIND, AND SOUND PARTICLES HEREBY DISCLAIMS ALL WARRANTIES AND CONDITIONS WITH RESPECT TO THE SOFTWARE PRODUCT, EITHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES AND/OR CONDITIONS OF MERCHANTABILITY, OF SATISFACTORY QUALITY, OF FITNESS FOR A PARTICULAR PURPOSE, OF ACCURACY, OF QUIET ENJOYMENT, AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS. SOUND PARTICLES DOES NOT WARRANT AGAINST INTERFERENCE WITH YOUR ENJOYMENT OF THE SOFTWARE, THAT THE FUNCTIONS CONTAINED IN THE SOFTWARE WILL MEET YOUR REQUIREMENTS, THAT THE OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR-FREE, OR THAT DEFECTS IN THE SOFTWARE WILL BE CORRECTED. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY SOUND PARTICLES OR A SOUND PARTICLES AUTHORIZED REPRESENTATIVE SHALL CREATE A WARRANTY. SHOULD THE SOFTWARE PROVE DEFECTIVE, SOUND PARTICLES MAY CHOOSE TO REPLACE THE LICENSEE'S COPY OF THE SOFTWARE. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES OR LIMITATION ON APPLICABLE STATUTORY RIGHTS OF A CONSUMER, SO THE ABOVE EXCLUSION AND LIMITATIONS MAY NOT APPLY TO YOU. THIS LIMITATION OF WARRANTY SHALL NOT BE APPLICABLE SOLELY TO THE EXTENT THAT ANY SPECIFIC

PROVISION OF THIS LIMITATION OF LIABILITY IS PROHIBITED BY ANY LAW, WHICH CANNOT BE PRE-EMPTED.

LIMITATION OF LIABILITY: TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL SOUND PARTICLES OR ITS AFFILIATES BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF OR INABILITY TO USE THE SOFTWARE OR DEFECT IN OR CAUSED BY THE SOFTWARE, INCLUDING BUT NOT LIMITED TO COMPROMISING THE SECURITY OF YOUR COMPUTER, OPERATING SYSTEM OR FILES, OR THE PROVISION OF OR FAILURE TO PROVIDE SUPPORT SERVICES, EVEN IF SOUND PARTICLES HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY CASE, SOUND PARTICLES ENTIRE LIABILITY UNDER ANY PROVISION OF THIS EULA SHALL BE LIMITED TO THE AMOUNT ACTUALLY PAID BY YOU FOR THE SOFTWARE OR REPLACEMENT OF THE SOFTWARE WITH PRODUCT OF COMPARABLE RETAIL VALUE, AS SOUND PARTICLES MAY ELECT IN ITS SOLE DISCRETION. IF SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY, THE ABOVE LIMITATION MAY NOT APPLY TO YOU IN PART OR WHOLE. THIS LIMITATION OF LIABILITY SHALL NOT BE APPLICABLE SOLELY TO THE EXTENT THAT ANY SPECIFIC PROVISION OF THIS LIMITATION OF LIABILITY IS PROHIBITED BY ANY LAW, WHICH CANNOT BE PRE-EMPTED.

Licensee agrees to indemnify, defend and hold harmless Sound Particles and its affiliates and their respective officers, employees, directors, agents, licensees (excluding you), sublicensees (excluding you), successors and assigns from and against any and all liability, costs, losses, damages, and expenses (including reasonable attorneys' fees and expenses) arising out of any claim, suit, or cause of action relating to and/or arising from (a) your breach of any term of this EULA; (b) your violation of any rights of any third party; or (c) your use or misuse of the Software. Your indemnification obligations set forth in the immediately preceding sentence shall survive the termination of this EULA.

VI. CLOSING PROVISIONS

1. If any stipulation of this EULA should be or become invalid, either completely or in part, this shall not affect the validity of the remaining stipulations. The parties undertake instead to replace the invalid stipulation with a valid regulation which comes as close as possible to the purpose originally intended.

2. TERMINATION: This EULA will terminate automatically if you fail to comply with its terms and conditions. In such event, you must destroy all copies of the Product and all of its component parts (including the software) and cease and desist from accessing any Products.

3. This Agreement shall be governed and construed by the laws of Portugal. The United Nations Convention for the International Sale of Goods shall not apply.

The exclusive place of jurisdiction with respect to all disputes based on or in connection with this Agreement shall be Leiria, Portugal. However, Sound Particles reserves the right to sue Licensee at Licensee's place of residence or place of business.

Should you have any queries concerning this EULA, please write to this address:

Sound Particles S.A.
IDD, Rua da Carvalha, 570,
2400-441 Leiria
Portugal