



# GrainSpace

(AU, AAX, CLAP, VST2, VST3)

produced by Luca Capozzi (Audiority), January 2017.

**Current Manual version:** v2.6 (April 2025)

**GrainSpace** is a granular processor focused on real-time granulation, harmonization and reverberation of the incoming audio signal. **GrainSpace** provides dynamic grain generation (up to 32 per channel), 7 grain parameters, a multi-mode filter, 4 grain modulators (including two 11 waveforms LFO), smearing, chord resonator and reverb to create crazy sound effects, rich textures and much more.

Please, read carefully both product specifications and system requirements **before** purchasing any **Audiority** products.

# GrainSpace

produced by Audiority, January 2017.

## Credits

Concept & DSP: Luca Capozzi (Progsounds / Audiority), January 2017.

GUI Design: Luca Capozzi

Code & DSP: Luca Capozzi

Published by Audiority Srls

Copyright © 2017 – Progsounds by Luca Capozzi – All rights reserved.

Copyright © 2018-2025 – Audiority Srl – All rights reserved.

## Specifications

- Real-Time Granular Engine
- Recording Buffer of 10 seconds
- Playback modes: Stereo, Mono (L+R), Side
- Up to 32 grains per channel
- Grain Size up to 500ms
- 7 Grain Parameters (Size, Distance, Pitch, Feedback, Freeze, Position and Stretch)
- 2 Stretch modes
- Multi Mode Filter
- 4 Grain Modulators (2 x LFO, 2 x Random)
- Tempo sync'd LFOs with 11 waveforms
- Smearing
- Chord Resonator
- Reverb

## System Requirements

### PC

- Windows 7 64bit or later
- Intel i5 or equivalent
- 4 GB RAM
- Screen resolution: 1024×768
- VST2, VST3, AU, CLAP 64-bit host
- PT11 or higher, AAX 64-bit host

### MAC (Intel)

- OSX 10.9 or later
- Intel i5 or equivalent
- 4GB RAM
- Screen resolution: 1024×768
- VST2, VST3, AU, CLAP 64-bit host
- PT11 or higher, AAX 64-bit host

### MAC (Silicon)

- macOS 11.0 or later
- M1 or higher
- 4 GB RAM
- Screen resolution: 1024×768
- VST2, VST3, AU, CLAP 64-bit host
- PT11 or higher, AAX 64-bit host

# INDEX

FILE LOCATIONS.....	4
PLUGIN ACTIVATION.....	5
GRAINSPACE PARAMETERS.....	8
CHANGELOG.....	10

## FILE LOCATIONS

### Mac

All presets, license, IR files and settings are located in:  
/Users/Shared/Audiority/

AAX and VST plugins will be placed in their own Audiority sub-folder located in:

AAX: /Library/Application Support/Avid/Audio/Plug-Ins/Audiority

CLAP: /Library/Audio/Plug-Ins/CLAP/Audiority

VST: /Library/Audio/Plug-Ins/VST/Audiority

VST3: /Library/Audio/Plug-Ins/VST3/Audiority

### PC

All presets, license, IR files and settings are located to:  
C:\Users\Public\Public Documents\Audiority

AAX and VST plugins will be placed in their own Audiority sub-folder, usually located in:

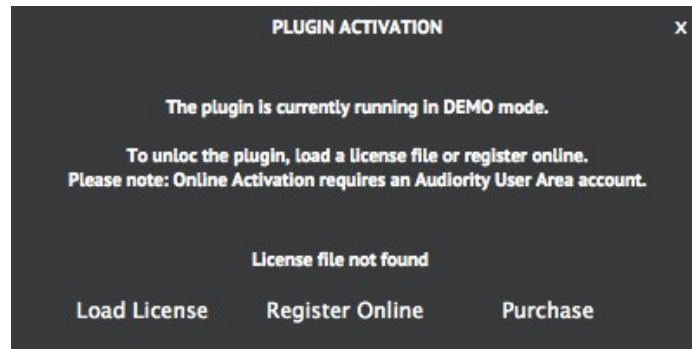
AAX: C:\Program Files\Avid\Audio\Plug-Ins\Audiority

CLAP: {Your CLAP Path}\Audiority

VST: {Your VST Path}\Audiority

VST3: {Your VST3 Path}\Audiority

## PLUGIN ACTIVATION



Once you install and open the plugin for the first time, it will be in **Demo Mode** until a license file is loaded. In Demo Mode the plugin will output 3 seconds of silence every minute.

You can activate the plugin either OFFLINE or ONLINE.

### OFFLINE ACTIVATION

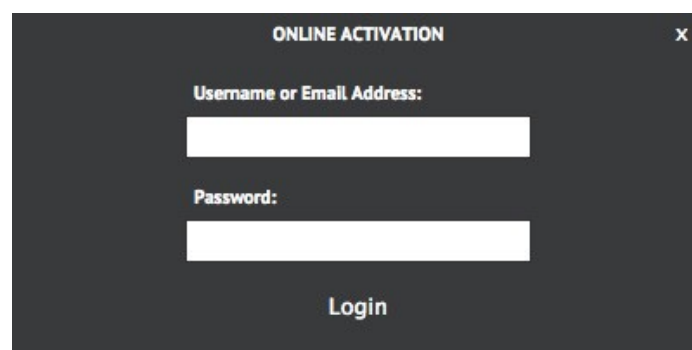
If you purchased the plugin from our site, you should have received an email to download the installers and the license file. Save the license file you got with your purchase email (or via our User Area) anywhere on your computer.

Then, to activate the plugin, click on the **Audiority** logo and select “**Register**”. The Registration window will pop up allowing you to load the license file you got while purchasing the plugin by clicking the “**Load License**” button. Alternatively, you can drag and drop the license file on the registration window.

**NOTE:** If you purchased the plugin from one of our dealers, please check the “**USER AREA AND REDEEM CODES**” section below.

### ONLINE ACTIVATION

If you are registered to our User Area, then you can activate the plugin online.



Insert your Username (or email address), your password and click the “**Login**” button. The license file will be automatically delivered in your computer and the plugin will be activated.

## USER AREA AND REDEEM CODES

If you purchased from one of our dealers, then you should have received an email with a redeem code. This code is required to deposit a license in your User Area account and let you download the license file or activate the plugin online.

If you don't have an User Area account yet, please follow these steps:

- 1) Go to <https://www.audiority.com/register> and fill out the signup form.

**IMPORTANT:** Please be sure to register with the **e-mail address you use for your purchases**, otherwise your products will not show. Since we use reCAPTCHA for registration only, please temporarily disable any ad blocker you are using.

**Username**

Heisenberg58

**First Name**

Walter

**Last Name**

White

**Purchase E-mail Address**

w.white@pollos.com

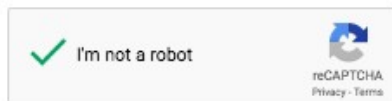
**Password**

.....

**Confirm Password**

.....

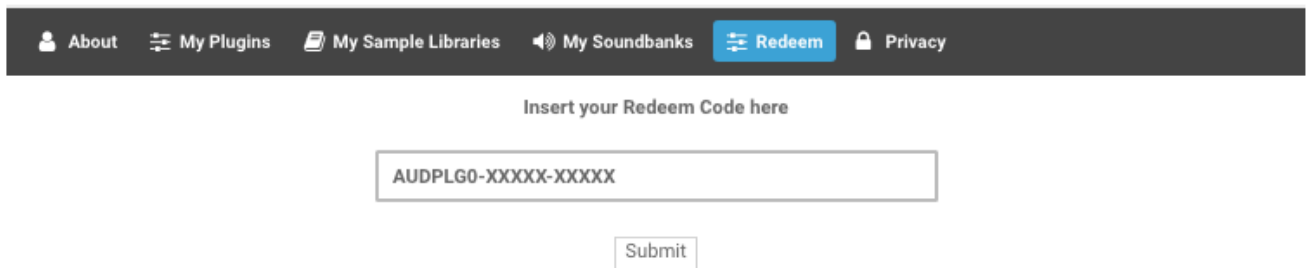
I read and agree to the Privacy Policy and Terms of Use



Register

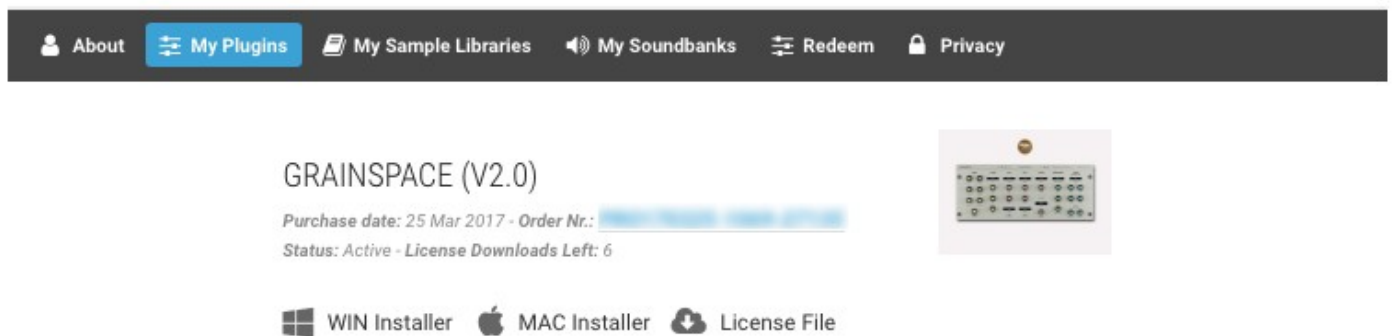
Login

2) Once registered, log in to your account by clicking the User Area section of our site. Click the **REDEEM** section of your account and paste the code you received via email from our dealer.



The screenshot shows a dark navigation bar at the top with links for 'About', 'My Plugins', 'My Sample Libraries', 'My Soundbanks', 'Redeem', and 'Privacy'. Below the navigation bar, the text 'Insert your Redeem Code here' is centered. A text input field contains the code 'AUDPLG0-XXXXX-XXXXX'. Below the input field is a 'Submit' button.

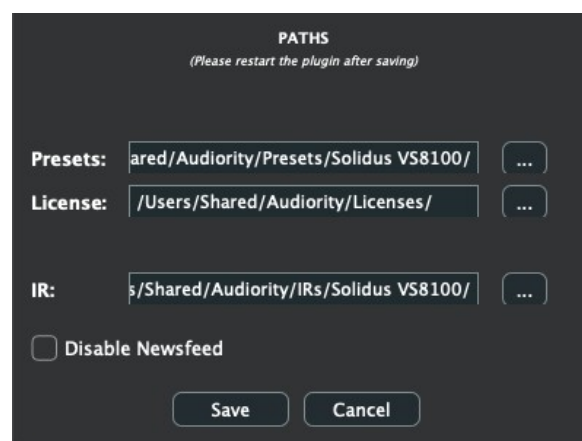
3) After submitting the code, a license will be deposited in your account and will be shown in “**MY PLUGINS**” section of your User Area.



The screenshot shows the 'MY PLUGINS' section of a user account. The navigation bar includes 'About', 'My Plugins', 'My Sample Libraries', 'My Soundbanks', 'Redeem', and 'Privacy'. The main content area displays the plugin 'GRAINSPACE (V2.0)'. Below the plugin name, it shows 'Purchase date: 25 Mar 2017 - Order Nr.: [redacted]' and 'Status: Active - License Downloads Left: 6'. To the right is a small image of the plugin's interface. Below the plugin information are three download options: 'WIN Installer', 'MAC Installer', and 'License File'.

4) Now you can click “License File” and save the license anywhere on your computer and ready to be loaded through the plugin registration window. You can also skip this part and activate your plugin online (see previous section of this manual).

## USER PATHS SETTING



The screenshot shows a dark dialog box titled 'PATHS' with the subtitle '(Please restart the plugin after saving)'. It contains three text input fields, each with a browse button ('...') to its right. The first field is labeled 'Presets:' and contains the path 'ared/Audiority/Presets/Solidus VS8100/'. The second field is labeled 'License:' and contains the path '/Users/Shared/Audiority/Licenses/'. The third field is labeled 'IR:' and contains the path 's/Shared/Audiority/IRs/Solidus VS8100/'. Below these fields is a checkbox labeled 'Disable Newsfeed' which is currently unchecked. At the bottom of the dialog are two buttons: 'Save' and 'Cancel'.

By selecting “**Settings**” from the logo menu, you can change the path for **Presets**, **License** and **IR** folders. You can also disable our Newsfeed from here.

**Note:** Please do not move the **Settings** folder from its default location.

# GRAINSPACE PARAMETERS



## Grain Parameters (Yellow Knobs)

- GRAIN SIZE** Sets the size in milliseconds for each grain. Range: 16ms to 500ms
- DISTANCE** Sets the distance between each grain. Increase to generate and overlap grains getting a richer texture.
- PITCH** Change the pitch of each grain in semitones according to the selected PITCH SCALE
- FEEDBACK** Increase the feedback in the granular delay line. Useful to create delay and shimmer effects. Most effective if used while modulating pitch and size. **CAUTION: can create a VERY LOUD signal.**
- FREEZE (Knob + Switch)** When on, it stops recording the incoming audio and loops the internal buffer. You can use the grain parameters to travel inside the recorded audio. You can also sync the freezing, to get time varying effects. HINT: map the **Freeze Switch** to your controller for performing live.
- POSITION** Changes the reading position from the recorded buffer. Positive values creates a delay effect, while negative values creates a reverse effect.
- STRETCH** A crude but nice sounding time stretch algorithm. Positive values creates a stuttering acceleration of the signal, while negative values slow it down. Very dirt and glitchy.

## Grain Filter Parameters (Yellow Knobs)

- TYPE** Sets the type of filter you'll be using.
- CUTOFF** Sets the filter's cutoff frequency in Hz.
- RES** Sets the filter's resonance. LPF6 and HPF6 are not affected by this parameter.
- SAT** Increase the saturation of the selected filter.

## LFO 1 & 2 (Red Knobs)

- WAVE** Sets the LFO waveform.
- RATE** Sets the LFO speed.
- AMOUNT** Modulation amount from -100% to 100%.
- DEST** Sets the parameter that will be modulated by the current LFO.
- UNI** When enable, will switch the LFO output from bipolar to unipolar.



### RAND 1 & 2 (Red Knobs)

**DEST** Sets the parameter that will be modulated by the current LFO.  
**AMOUNT** Modulation amount from -100% to 100%.

### Grain Output (Green Knobs)

**PLAYBACK MODE** Sets the plugin playback mode. In **Stereo** each channel is independently processed; in **Mono** the channels of the incoming signal are summed; in **Side**, only the difference between channels is processed.  
**SMEAR** Smears the incoming audio signal by processing it with a chain of allpass filters  
**GRAIN VOL** Adjusts the volume of the granulated signal.  
Range: -12db to +12dB  
**GRAIN BLEND** Mixes the dry and granulated signal and send it to the chord resonator.

### Chord Resonator (Blue Knobs)

**CHORD** Sets chord type. When set to "None", it works as a resonant comb filter.  
**DECAY** Sets the decay length of the resonator.  
**TUNE** Sets the root note of the chord.  
**GAIN** Adjusts the volume of the resonator.  
Range: -12db to +12dB  
**MIX** Mixes the dry and processed signal and send it to the reverb.

### Reverb (Blue Knob)

**REV DECAY** Increases the reverberation time  
**REV MIX** Adjusts the reverberation amount

### GLOBAL CONTROLS (Footer)

**INPUT / OUTPUT** Pre/Post effect gain  
**PITCH SCALE** Quantize the grain pitch to the selected scale  
**ALT STRETCH** Alternate stretch mode  
**LEGACY** Sets the engine in LEGACY MODE, for compatibility with patches made with v2.3 and lower. In this mode, the Grain Buffer is reset to 2 seconds.  
**MIX** Dry/wet signal mixer.

### RESIZING CONTROLS (Audiority logo menu)

**Small / Default / Big Size** Reduce, reset or increase the size of the plugin interface.  
**Resizing Corner** You can resize from the bottom right corner of the GUI

# CHANGELOG

## v2.6 (April 2025)

- NEW: Framework update
- NEW: Improved UI
- FIX: Granulator suddenly stopping on ARM CPUs (Mac Silicon or ARM PC)
- BREAKING CHANGE: macOS minimum version is now 10.13

## v2.5 (July 2023)

- NEW: Framework update
- NEW: AAX Native Silicon
- NEW: McRocklin presets
- CHANGE: Improved tempo sync
- FIX: Mac installer was asking for Rosetta on Silicon Macs
- FIX: Windows installer could erase User folder when updating

## v2.4.2 (October 2022)

- FIX: Plugin crashing while trying to edit a knob value via shift + double click
- FIX: Missing value units on Chord Gain and Chord Mix knobs

## v2.4.1 (October 2022)

- NEW: Legacy Mode

## v2.4 (September 2022)

- NEW: Updated Framework
- NEW: Modulation destinations for Chord Resonator and Reverb sections
- NEW: Alternate Stretch mode
- NEW: Input / Output / Mix controls
- NEW: CLAP plugin format (beta)
- NEW: Non-destructive Monophonic Modulations (CLAP only)
- NEW: Persistent GUI settings (via Settings option)
- NEW: Drag and Drop license file on registration window
- NEW: Vector toolbar
- NEW: Corner Resizer (bottom right corner of the UI)
- NEW: More presets
- FIX: Improved Licenser and Online Activation
- FIX: GUI not showing correct preset name when opened the first time
- FIX: Improved button automations
- FIX: Tail not flushed on transport restart
- FIX: Improved glitching reduction
- FIX: Grain Position not working as expected
- FIX: Infinite feedback when Grain Feedback is set to a high value
- CHANGE: Improved error messages
- CHANGE: Grain Buffer size increased to 10 seconds
- BREAKING CHANGE: Improved licenser requires a new activation

## v2.3 (March 2021)

- NEW: Updated Framework
- NEW: Universal 2 Binary for Apple Silicon Macs
- CHANGE: HQ is now global (per session)

## v2.2.1 (October 2020)

- FIX: Chord Resonator wrong pitch when enabling HQ
- FIX: Licenser not validating license file on some configurations

## v2.2 (August 2020)

- NEW: Retina / HiDPI support
- FIX: Subsonic build up on some presets
- FIX: Smear parameter not working
- CHANGE: Improved framework and file size

## v2.1 (March 2020)

- FIX: Noises while changing Pitch
- FIX: Noises when modulating Pos
- FIX: Typo in GUI
- FIX: Typo in Bouncing Grains preset
- FIX: Some presets resetting to INIT state
- FIX: Last save location not stored
- FIX: Silence triggered randomly in some configurations
- NEW: Notifications System
- NEW: VST3 plugin format
- NEW: Mac OSX 10.15 Catalina support
- CHANGE: New framework
- BREAKING CHANGE: Reverb on/off moved from Decay to Mix
- BREAKING CHANGE: 64bit only

**v2.0** (August 2018)

- NEW: Reworked graphic interface
- NEW: Grain Filters
- NEW: HQ interpolation (switch on toolbar)
- NEW: More modulations
- NEW: Chord Resonator
- NEW: Resizable GUI

For older changes, please check the product page on our site.

## Audiority Srl – EULA (End-User License Agreement)

The software that accompanies this license is supplied under a license agreement. By installing this software you are agreeing to the Audiority License Agreement. If you do not agree with these terms, do not install the software. All software download purchases are non-refundable. However, if you haven't downloaded a license file (or used a redeem code), you may obtain a refund within 14 days through the dealer where you purchased the software, or if purchased at any of Audiority online stores, by contacting support@audiority.com.

The terms of this license agreement are as follows:

By installing the software, you confirm your acceptance of the Audiority Srl End User License Agreement. This is a revocable, non-exclusive, single-user License.

This End User License Agreement ("Agreement") is between Audiority Srl and you.  
IMPORTANT – PLEASE READ THIS LICENSE AGREEMENT CAREFULLY BEFORE INSTALLING THIS SOFTWARE.

By using the Audiority Srl Software you accept these terms. The Audiority Srl Software may be distributed with software or components from third-parties ("Third-Party Software"). Use of Third-Party Software is also subject to the terms of this EULA.

### 1. Limited Use License.

The Software is licensed, not sold, by Audiority or its Third-Party Software suppliers ("Suppliers") to the original end user for use only on the terms set forth in the Agreement. If and only if your Software is purchased through a Audiority Authorized Dealer or Distributor, Audiority, as Licensor, grants you, as an end user Licensee, a non-exclusive license to use the Software (which includes computer software, updates and any bug fixes subsequently delivered and associated media, printed materials and "online" or electronic documentation).

### 2. Title.

The Software is owned by Audiority or its Suppliers as applicable, and is protected by copyright laws and international treaty provisions, as well as other intellectual property laws and treaties. Audiority (or its Suppliers, as applicable) retains title to and ownership of the Software and all copies, as well as any rights not specifically granted. This Agreement only gives you certain rights to use the Software and related documentation, which may be revoked if you do not follow these terms.

### 3. Limited Rights to Install and Use the Software.

#### (i) Permitted use and restrictions.

You may install the Software into the memory of no more than three computers for your internal business use or your own personal enjoyment, but may not redistribute or electronically transfer the Software to someone else's computer or operate it in a time-sharing or service-bureau operation.

#### (ii) Reverse engineering and copying limitations.

You may make one copy of the Software for backup purposes only (and replacement backup copies in the event of loss of or damage to a backup copy), provided you include all copyright notices contained on the original media on the backup copy. You may not modify, translate, adapt, reverse engineer, decompile, create other works from, or disassemble the Software or any portions thereof (except and to the extent that applicable law expressly permits reverse engineering, decompilation or disassembly). This includes, but it's not limited to, analytical captures, impulse responses, profiles and/or machine learning training/validation/prediction.

#### (iii) Technical limitations.

The Software may include technological measures that are designed to prevent or detect unlicensed use of the Software. Circumvention of these technological measures is prohibited, except and only to the extent that applicable law expressly permits, despite this limitation. Any attempt to circumvent technical limitations may render the Software or certain features unusable or unstable, and may prevent you from updating or upgrading the Software.

#### (iv) No reconfiguration.

The Software is licensed for installation and use only in the manner it was provided to you, as configured by an automated installation program provided with the Software, or as described in Audiority's Documentation. You may not separate the components contained in the Software or otherwise reconfigure the Software to circumvent technical limitations on the use of the Software or to otherwise exceed the scope of your license.

### 4. Export and Renting Restrictions.

You may not export, convey, rent, sublicense, or otherwise distribute the Software or any rights therein to any person or entity.

### 5. Feedback.

Audiority shall have a royalty-free, worldwide, transferable, sublicenseable, irrevocable, perpetual license to use or incorporate into the Software any suggestions, ideas, enhancement requests, feedback, recommendations or other information provided by You relating to the features, functionality or operation of the Software ("Feedback"); provided, however, that Audiority shall have no obligation to use or incorporate into the Software any Feedback, and You shall have no obligation to provide Feedback.

### 6. Registration Information.

Audiority uses named licenses for its products. When You activate the Software, Audiority may collect your name and email address and other contact information that You choose to provide ("Registration Information"). You agree to provide your real full name (or company name) to Audiority in order to comply with the requirements needed to generate such licenses. Audiority reserves all rights to terminate a license in any moment if the information provided are incorrect and/or fake (pseudonyms, anonymous or fake names like "John Doe" are not allowed) without any notice. You agree that Audiority may use this Registration Information to contact You regarding your purchase and to deliver notifications relative to your use of the Software. Audiority does not collect or retain any financial information from or about You (such as payment card information).

### 7. License Transfer.

Except if otherwise stated within this EULA, Licensee may resell the software to a third party or transfer the software permanently if the Licensee purchased the Software from any Audiority store or from any Audiority Dealer. Audiority reserves all rights to deny any requests for the transfer of this license, and may institute transfer fees and policies as it sees fit at the time of any request for the transfer of this license, if the Licensee purchased the license from another Licensee. By transferring a license, 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). NFR (not for resale) copies, including freeware products, free bonus products, and giveaway copies, cannot be resold. Following respective request from Licensee via its email address registered with Audiority, and payment of the Transfer Fee, the license file of the Product will be transferred by Audiority to the third party, and at the same time the registration of Licensee for the software purchased will be deleted. The current and updated

Transfer Fee can be found at this address <https://www.audiority.com/faq/#1509113035751-cec03c9c-5c77>

#### 8. Excluded Products.

Audiority and its Suppliers give NO warranty for Software free of charge, including Software designated as "demo", "limited release," "pre-release," "loan," "beta" or "test." This Software is provided "AS IS."

#### 9. Limitation of Liability.

AUDIORITY AND ITS SUPPLIERS SHALL HAVE NO LIABILITY TO YOU WHETHER IN CONTRACT, TORT, NEGLIGENCE OR PRODUCTS LIABILITY, FOR ANY CLAIM, LOSS, OR DAMAGE, INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOSS OF USE, BUSINESS INTERRUPTION, LOST DATA, OR LOST FILES, OR FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND OR NATURE WHATSOEVER ARISING OUT OF OR IN CONNECTION WITH THE USE OF OR INABILITY TO USE THE SOFTWARE OR DOCUMENTATION, OR THE PERFORMANCE OR OPERATION OF THE SOFTWARE, EVEN IF AUDIORITY OR ITS SUPPLIERS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN NO EVENT SHALL AUDIORITY'S TOTAL LIABILITY TO YOU FOR ALL DAMAGES, LOSSES, AND CAUSES OF ACTION WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE EXCEED THE AMOUNTS RECEIVED FROM YOU FOR YOUR LICENSE OF THE SOFTWARE.

#### 10. Termination.

To the extent permitted by law, and without prejudice to any other rights Audiority may have, Audiority may terminate your license if you materially breach these terms and conditions.

#### 11. Third-Party Software and Information.

This EULA governs any Third-Party Software distributed by Audiority. Audiority may include information about third party products and services, including links to Web sites run by others. Audiority is not responsible for, and does not endorse or sponsor, this third-party information.

#### 12. Miscellaneous.

This Agreement constitutes the entire agreement between the parties with respect to the use of the Software and Documentation, and supersedes all prior or contemporaneous understandings or agreements, written or oral, regarding such subject matter. No amendment to or modification of this Agreement will be binding unless in writing and signed by a duly authorized representative of Audiority.

Should you have any questions concerning this Agreement, please contact Audiority Srl at [info@audiority.com](mailto:info@audiority.com)

Last updated on Feb 24th, 2025

Copyright ©2010-2025 Audiority Srl. All rights reserved.

# Thank You

We wanna thank you for buying **Audiority GrainSpace** plugin.

We hope you will enjoy it as much as we did.

If you have any question, concerns, technical issues or even for just say 'Hello', get in touch with us at:

[info@audiority.com](mailto:info@audiority.com)

or checkout our site at [www.audiority.com](http://www.audiority.com)

Cheers,  
Luca

**Follow us on:**

[Facebook](#)

[YouTube](#)

[Instagram](#)

**Official Facebook Support:**

[Audiority Users](#)

**Audiority User Area: (registration is required to access the UA and download installers and license files)**

[Audiority User Area](#)

**Join our Discord server:**

[Audiority Discord](#)

