



GrainSpace

(VST, VST3, AU, AAX)

produced by Luca Capozzi (Audiority), January 2017.

Current Manual version: v2.1 (March 2020)

GrainSpace is a granular processor focused on real-time granularization, 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

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Specifications

- Real-Time Granular Engine
- Recording Buffer of 2 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)
- 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
- 2 GB RAM
- Screen resolution: 1024×768
- VST2, VST3, AAX 64-bit host

MAC

- OSX 10.8 or later
- Intel i5 or equivalent
- 2 GB RAM
- Screen resolution: 1024×768
- VST2, VST3, AU, AAX 64-bit host

INDEX

UPGRADING FROM V1.X.X.....	4
PLUGIN ACTIVATION.....	5
USER AREA AND REDEEM CODES.....	6
USER PATHS SETTING.....	7
GRAINSPACE PARAMETERS.....	8
CHANGELOG.....	10

UPGRADING FROM V1.X.X

Please, read carefully if you are upgrading from any v1.x.x version of this plugin.

This version will replace your current GrainSpace v1 installation. Please, backup your presets and license file before continuing.

Old presets, licenses and settings files were located to

Mac

~/Music/Audio Music Apps/Audiority

PC

Documents\Audiority

New Paths

Mac

All presets, license files and settings will be now 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
VST: /Library/Audio/Plug-Ins/VST/Audiority

PC

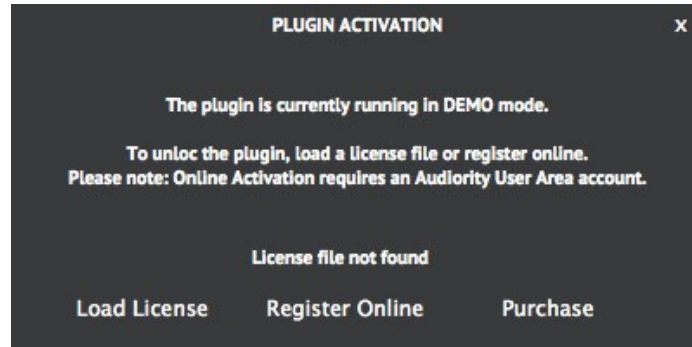
All presets, license files and settings will be now located to:
C:\Users\Public\Public Documents\Audiority

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
VST: {Your VST Path}\Audiority

If you are upgrading from a previous version, please remove the old plugin from their related folders.

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.

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

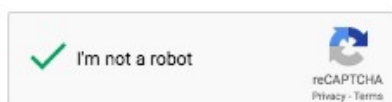
Password

.....

Confirm Password

.....

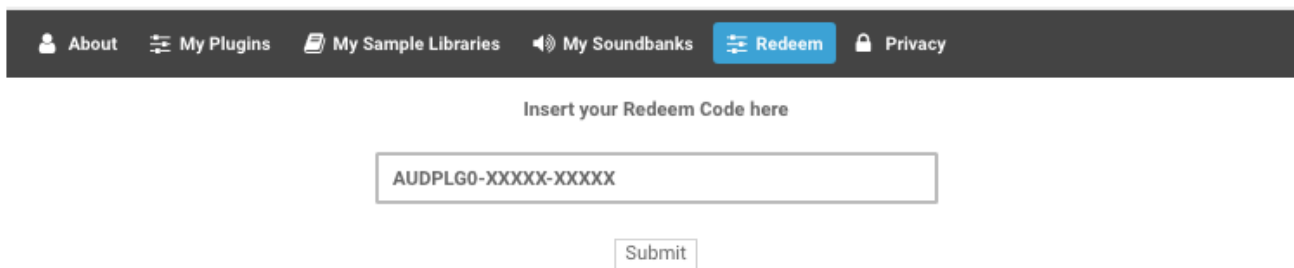
I read and agree to the Privacy Policy and Terms of Use



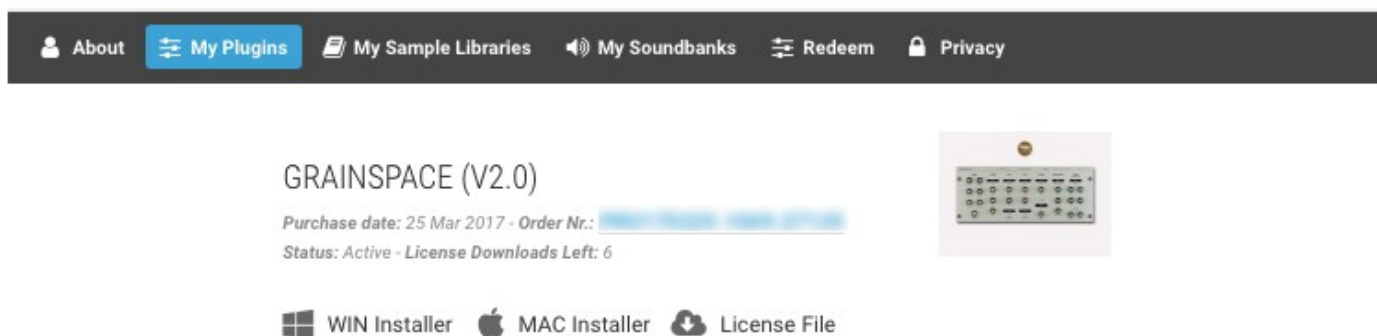
Register

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.

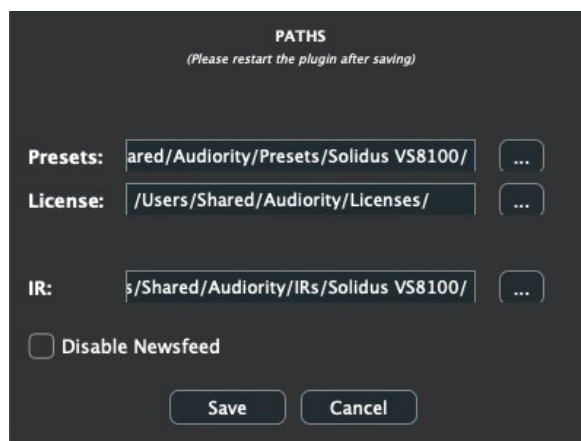


3) After submitting the code, a license will be deposited in your account and will be shown in “**MY PLUGINS**” section of your User Area.



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



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. Range: -24st to +24st
- 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

CHANGELOG

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

v.1.2.1: (October 2017)

- FIX: High CPU usage on some systems after updating to v1.2

v1.2: (October 2017)

- FIX: Menus getting keyboard focus
- FIX: Freeze button always on when randomized
- FIX: Wrong init value for LFO polarity
- NEW: Dotted and Triples LFO rates
- NEW: Distance modulation
- IMP: Reduced file size

v1.1.1 (March 2017)

- FIX: AAE Error on Pro Tools 12.7.x
- FIX: Performance improvements

v1.1 (March 2017)

- NEW: All knobs can be randomized
- NEW: All knobs can be locked
- NEW: Reverb Decay and Mix
- NEW: Freeze Button

v1.0.4 (February 2017)

- FIX: Plugin state not restored on Bitwig
- FIX: Slow GUI load time

v1.0.3 (February 2017)

- Cleaner code. Small CPU performance improvements.

v1.0.2 (January 2017)

- FIX: Error while scrolling presets with navigation buttons
- FIX: Sound suddenly stopping on VST version
- Reworked Windows installer

v1.0.1 v2 (January 2017)

- More presets

v1.0.1 (January 2017)

- Minor bug fixes
- More presets

v1.0 (January 2017)

- Original release

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Last updated on August 1, 2018

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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

or checkout our site at www.audiority.com

Cheers,
Luca

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