



PRODUCT MANUAL



riginating from Korea, the gayageum is a traditional zither featuring anywhere from 12 to 25 strings. Within the middle of the strings, independent bridges are used to tune the instrument. Due to the low tension on the strings, by pressing down on the string to one side of the bridge while plucking on the other, pitch bends beyond a perfect 5th are possible, letting the instrument access notes not otherwise possible as well as allowing impressive virtuosic effects and a highly unique tone and style by bending and tuning multiple strings while playing.

Luna Lee is a virtuoso player turned YouTube star who seeks to bridge the world between the traditional sound and techniques of the gayageum with innovative techniques designed to evoke the sounds of western instruments and musical styles. Her covers of classic rock and other popular music draw the ears of tens of thousands of followers both online and in concerts throughout the year and around the world. No one in the sampling domain has yet done justice to the unique and stunningly flexible gayageum until now.

DEVELOPMENT

he instrument sampled was a 25-string pentatonic gayageum, personally selected by performer Luna Lee from her extensive collection of gayageums for its rich tone and quality.

As a performer, Luna weaves traditional techniques with novel approaches to create sounds emulating everything from electric guitars to drum kits. We brought this philosophy to heart with the project, providing an extensive array of microphone positions and articulations, including Luna's own original pickup inside the instrument- the same one she uses in many of her videos and recordings.

Sampling was done at The Record Co, a local recording studio in Boston, MA. In addition to Luna's pickup, a pair of small diaphragm condensers and a ribbon mic were placed as overheads and a pair of Aston Spirits served as room/main mics. Underneath, a kick drum mic was placed to pick up the resonance of the instrument's frame.

The entire range of the instrument was sampled as-is with up to four round robins and at up to three dynamic layers across a number of different articulations. This was supplemented by an assortment of techniques, phrases, and short melodic snippets.

As a bonus, Luna additionally performed various percussive sounds on the instrument which can be used to make unique percussion tracks.



INSTALLATION

egin installation by downloading the library after completing checkout. This will result in a single .zip file containing the entire library. Extract the contents of this .zip and you will see a folder called "Lunas Gayageum".

Place this folder wherever you would like the library to be accessed from in the future – this could be on an external hard drive, an internal SSD, or your main hard drive.

To use the library, drag and drop any of the .nki (Kontakt instruments) into an instance of Kontakt (either standalone or plug-in), as shown below.

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SNAPSHOTS

S napshots are a handy way to save settings such as effects or favorite mic positions without having to worry overwriting your .nki files or trying to locate the right .nki with the settings you want.

For example, if you want to add effects to the instrument and save it as a new snapshot to recall later (e.g. adding a delay or distortion effect), click the wrench in the top left and scroll all the way down to 'InsertEffects'. Click the plus in the corner of one of the dark gray boxes and select the effect you wish to add.

Configure it to taste, then scroll up and hit the floppy disk/save icon to the right of the snapshot name (make sure you are in the snapshot panel by clicking the camera icon again). Give it a descriptive name and enjoy your handiwork later at the press of a button!





OPERATION

nce loaded in Kontakt, the GUI will become available to you. This convenient window will provide nearly everything you need to control and shape the sound of the instrument from swapping articulations to controlling the stereo image to help it fit in your mix. In this section of the manual, I'll walk you through each part of the GUI and typical settings.





Starting with the top of the instrument, we have the default Kontakt header. This area provides basic instrument settings and allows you to shrink or expand the GUI as needed.

On the left is the wrench icon, which allows access "under the hood" of the instrument. This is best for veteran Kontakt users only, but is worth exploring if you're new to Kontakt as well.

The central gray box displays general information and settings for the instrument. You can swap this display over to show the snapshots menu simply by pressing the camera icon to the right, and vice versa by pressing the information 'i' icon.

Output will control where the audio data goes to. Typically this should be left untouched unless working with a surround mix or bussing specific instruments to different reverb sends or the like.

MIDI Ch. controls what input MIDI channel will send signals to this particular instrument, allowing you to set up multi-timbral sets of several different instruments in a single instance.

Voices displays how many voices are active and the maximum available. You may experience some memory/CPU savings by reducing the max number.

Memory displays how much memory is in use by this instance. You can reduce this by unloading mic positions, articulations, or purging unused files to the right-hand side.



The central part of the GUI is dedicated to shaping the sound of the instrument.

To the left are the controls for the available mic position. There is a volume slider (vertical), a circular purge/load button (to reduce the memory footprint when not in use), and a pan slider (horizontal).

Beneath the mic position controls are horizontal controls for stereo width and stereo pan. These use delay and other special processes to truly perceptually move the instrument around the virtual soundscape as opposed to traditional volume-based pan found in your DAW or mixer, providing a much more realistic result, especially when used in subtle combination.

To the right is the effects stack, which again have circular on/off toggles for loading and unloading effects. On the top is a simple low-pass/high-pass filter. You can use this to shape the instrument's sound or remove unwanted noises.

Below that is the convolution reverb, which provides an excellent and realistic hall sound. The pre-delay controls when the sound of the instrument reaches the mics after bouncing off the walls. This is similar to placing the mics farther or closer to the sound source (it takes about 2.9 ms for sound to travel one meter, or 0.9 ms for sound to travel one foot, so place your pre-delay accordingly to fit your virtual placement.

The 'Room' is a measure of how much room sound (i.e. reverb) is mixed back into

the signal. This is typically best between -15 and -5 dB. Below that and the reverb will not sound much, and higher may result in a muddy tone.

Finally, the 'R. Size' (room size) will control how large the space is. At 50%, it is analogous to a medium rehearsal space. At 100% a full concert hall, and beyond that it enters surreal levels of size.

At the bottom are controls for the attack of the sames (i.e. 'fade in'), and the volume of the sampled release tails. These are both articulation-specific, meaning that when you set one, it will only set that for the particular articulation you are on, making tweaking articulation responsiveness easy and painless.



The bottom of the UI is the articulation control area. To the left is a lock for locking the current articulation (so keyswitches will not accidentally switch articulations), as well as a button that can be clicked and dragged left or right to move the keyswitches around the keyboard.

To the right of these buttons is the current articulation indicator. The first articulation is actually three combined in one- you will see the two numbers, which indicate at which key velocities (how hard you press) it will switch.

The current articulation will be shown white to the right of this. The diamonds below will load or purge articulations, saving memory in the process.



PATCHES & ARTICULATIONS



Tithin the instruments folder, you will find several .nki files. Each file allows access to a different set of samples or sound generated from those samples.

Name

- Gayageum Articulations KS Aftertouch.nki
- Gayageum Articulations KS.nki
- Gayageum Patterns & Phrases KS.nki
- Gayageum Performance KS Aftertouch.nki
- 🛄 Gayageum Performance KS.nki

Articulations KS provides access to all of the multisampled gayageum articulations. This is the main .nki you will want to work out of. **Articulations KS Aftertouch** maps pitch bend upwards to aftertouch, letting you bend the notes in a similar fashion to the real instrument.

Patterns & Phrases KS contain patterns and short musical phrases recorded live on the instrument in different keys. These are excellent for when you need a realistic but very quick melody on gayageum without spending hours tweaking keyswitches. **Performance KS** provides several patches layered, controlled by key velocity. This allows you to quickly switch between sounds without having to worry about keyswitching. There is also an aftertouch-configured version of this as well.

Articulations on the gayageum and what they mean:

Plucked Mid- Standard finger pluck in the middle of the string. Gives a full, strong sound.

Plucked End- Similar to a pres de la table on harp, a pluck near the end of the string's length. Gives a brighter, banjo-like tone.

Plucked Vib- Standard finger pluck with live sampled vibrato.

Fingernail- A "backstroke" with the finger, pushing the string and using the nail to do the actual pluck. Alternate with standard pluck for interesting color/effect.

Strummed- A technique of Luna's own design where the neighboring strings are muted and the string is strummed by hand, similar to the lyre strumming technique used in North Africa.

Tremolo-Traditional tremolo technique; use modwheel for intensity.

Bend Up- A simple bend up to the nearest pentatonic neighbor.

Traditional Bend- A traditional bend technique.

Octave Bend- A bend ending in an octave leap.

4th Up- A leap of a perfect 4th.

3rds Up- A pair of thirds going up a wholestep.

Glissando Bend- A short gliss ending in a bend.

Glissando & FX- Various glissandi and effects such as tapping, strumming the "wrong" side of the instrument, etc.



TROUBLESHOOTING

f you are experiencing issues with the library, there are a few steps you can try to resolve the issues before contacting us. Below is a list of common possible problems and 'home remedies' that will work to fix them.

1. Samples missing dialogue.

If you see this window, it means that the samples were moved or are missing from their original location. If you can find the samples, move them into the Luna's Gayageum folder. If you still get the dialogue, do a batch re-save. Select the floppy disk icon at the top of the Kontakt window towards the right and select 'Batch Re-save'. Navigate to the 'Lunas Gayageum' folder and select it. When the dialogue pops up, click 'Search for folder' and select the samples folder. After the batch re-save is complete, you should not experience any further samples missing dialogues.

2. Instrument uses up too much memory or CPU.

Use the ircles beneath the articulations to purge any you doubt you will typically need, and turn off any effects you don't use (filter/reverb). Save this patch (under the floppy disk/save icon at the top of the Kontakt window itself) so that way it will load this way by default. Note that snapshots include which articulations and mic positions are selected and enabled/disabled.

3. Instrument is only available in "DEMO" mode.

This is caused by trying to run the instruments in Kontakt Player. Unfortunately there's nothing we can do about this- making libraries for Kontakt Player requires a licensing agreement with Native Instruments, which is simply not economical for small products like this.

However, Kontakt is on sale often around December/January for \$200 USD, and honestly that's not a bad price to pay for the "gateway drug" to literally thousands of free and commercial sample libraries. Regardless, we would be happy to offer you a refund if you are experiencing this issue and aren't interested in upgrading to the full Kontakt.

4. Instrument is distorting/clipping.

Make sure you turn down the 'Master Volume' for Kontakt to at or below 0, and turn down the instrument volume to at or around 0. You should be fine with some gain on most patches, but some will clip if you turn them up too much.

5. Instrument won't respond to MIDI input.

Make sure your DAW or standalone Kontakt is receiving MIDI from your device, then ensure that the MIDI Ch. is set to match.

If you have any other issues, drop us a line at contact@versilstudios.net.



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And our fantastic testers:

Jim Wolk, Babis Trihos, Quetzal Marchiori, Szymon Szewczyk, and Remo Pitisano