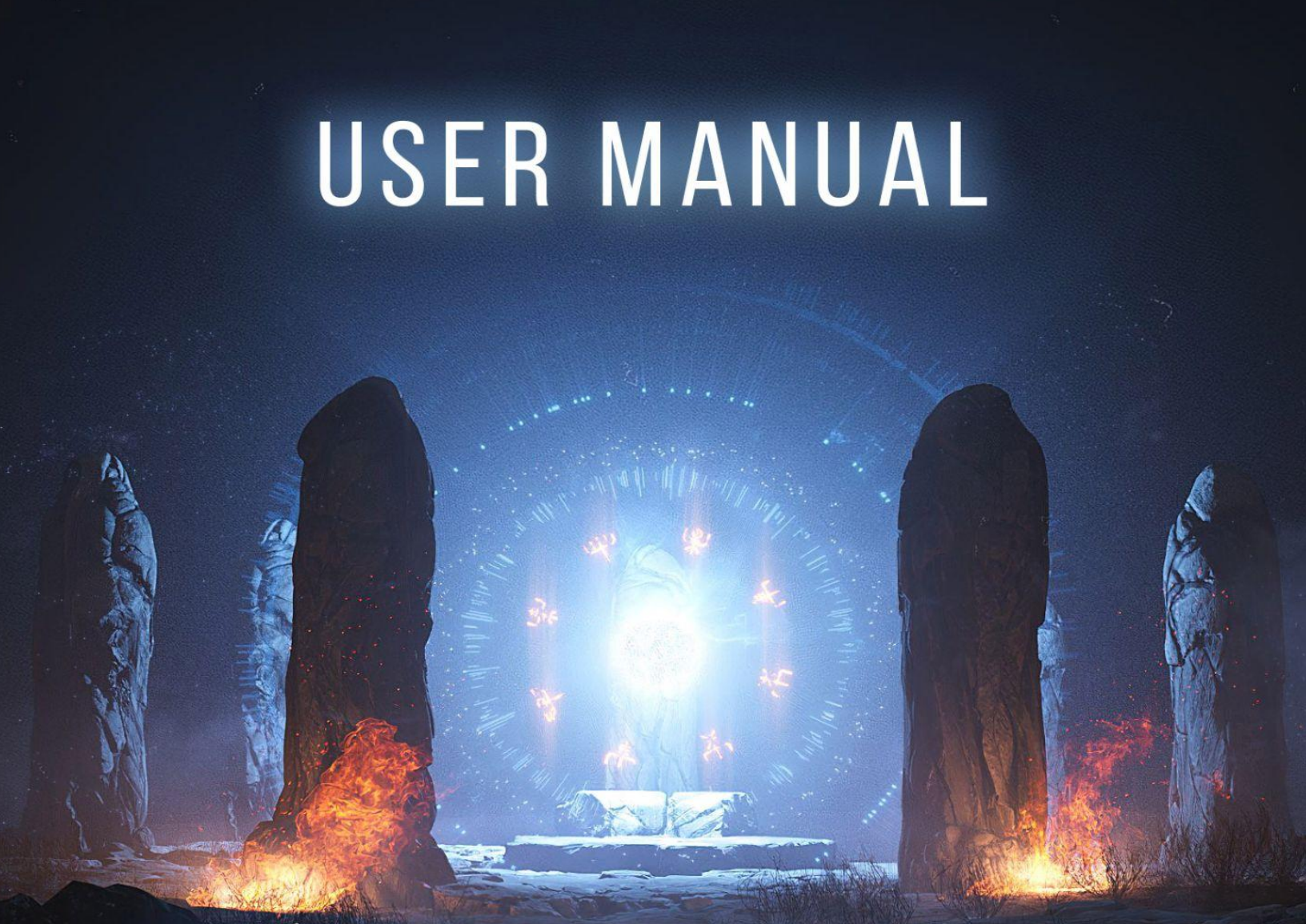
USER MANUAL



GROTH

WAVELET AUDIO

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Introduction

The sound of **GROTH** evokes the atmosphere of mystical old northern gods, ancient cultural traditions, burial mounds, and rugged forests suspended in frost. This toolbox draws on rich and diverse traditions of folk music rooted in the depths of our past.

GROTH provides everything you could need to create contemporary cinematic music inspired by the dark ages and mythology, modern viking-style music, and any kind of epic music with an air fantasy and distinctly dark post-horror atmosphere. It helps to add depth and provide a vast and unique atmosphere to your productions. This NKS library isn't limited to ancient pagan folk music — rather, it lies at the crossroads of cinematic, modern folk, and post-horror.

Meticulously sampled classical instruments meet passionately recorded folk and traditional instruments in one epic library. The sounds were recorded and performed with the collaboration of professional musicians, sound designers, and sound engineers. This toolbox offers a vast breadth of instruments and alternative techniques: from fully sampled northern tagelharpa and brutal buben drum to cold Tibetan kangling and self-built war horns. **GROTH** also delivers a massive number of organic sound designs for instant access. The Construction Kits will help you get inspired while saving time with ready-to-use elements, structures, and tricks from experienced composers. No need for third-party tools or plugins — all instruments are mixed, fully compatible, and ready to use.

Curating, sourcing, booking, and recording the many instruments and musicians for this project was a worthy challenge. The characteristics of each deeply rooted instrument necessitate a special and unique approach. Countless hours have been spent over the last two and a half years to integrate all these extraordinary instruments into our boldest and most inspiring toolbox.

Instruments

TAGELHARPA

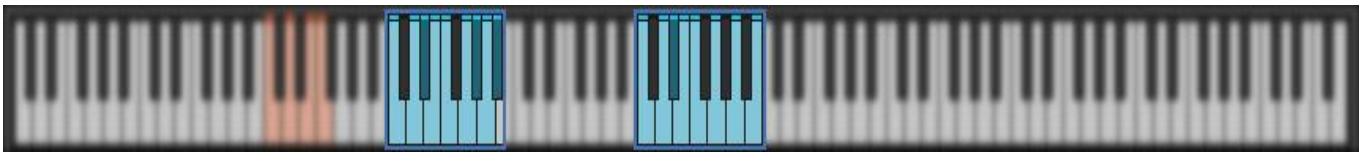
This three-stringed bowed lyre hails from northern Europe. One sampling approach is to record each string separately before combining them for the finished product. We didn't want to adopt this approach, as it loses the true essence of the tagelharpa. The instrument's beauty lies in its imperfection — it sounds almost out of tune. So recording all three strings together gives it a more human feel.

The tagelharpa contains three separate sections of controllers. The first section is the reverb setting with a knob that controls the volume of the wet signal. Under the wet knob is a menu where you can choose the convolution impulse or turn off the reverb.

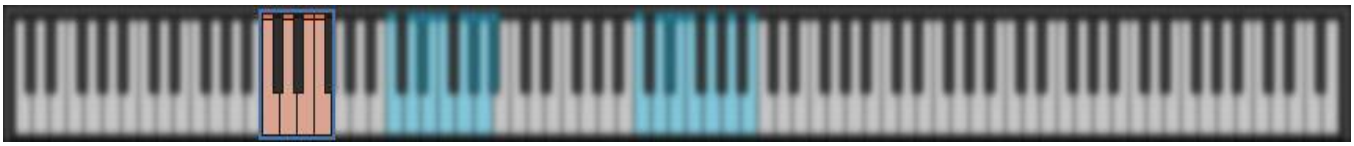
The tune menu allows you to select from five different tagelharpa tunings.

When an artist plays tagelharpa, the third string always reflects the root note. And the melody can only be

played using the first and second strings, with first string on the right and the second string on the left.



Generally, the tagelharpa plays rhythmic drones. The rebowing speed can be changed on the GUI or with red keyswitches.



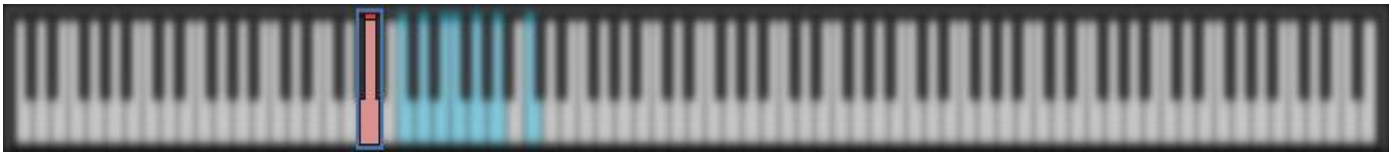
PERCUSSION

We included massive orchestral percussion (orchestral drums, snares, etc.) and single percussion (wooden percussion, tambourine, single drum, buben, etc.) to perfectly enhance the character of the other instruments. All instruments are mixed in different variations to give you more flexibility.

The instrument's main functionalities are divided into two pages. You can switch between them using the corresponding buttons at the bottom of the interface.

First, let's explore the contents of the Main tab. This contains the settings for Flam, Velocity, AHD, microphones, and a slider that changes the sound character to bright or dark.

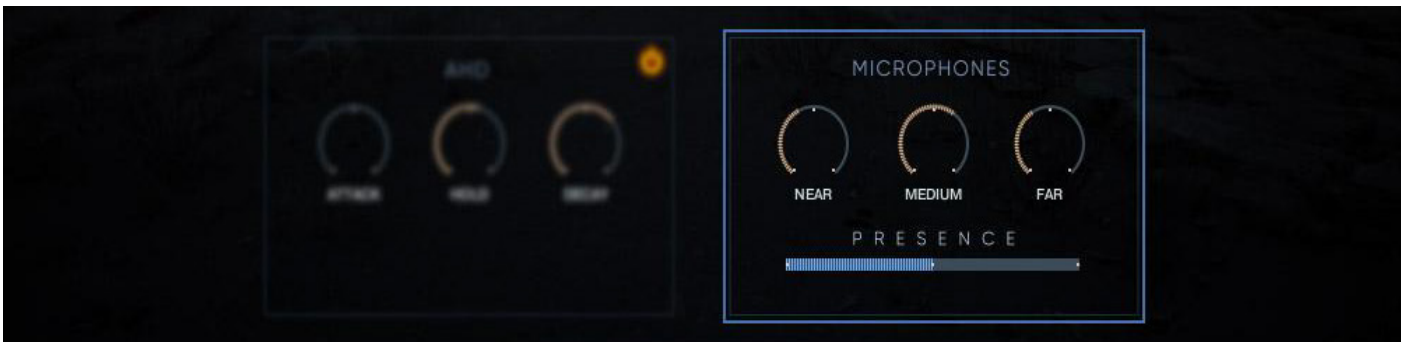
You can control the Flam speed and dynamics using the corresponding knobs, with the on-off button in the upper right corner of the Flam settings. If you need more flexible control of the Flam on-off, you can hold down the A0 key on the midi keyboard to invert the Flam state or use the MIDI editor of your DAW.



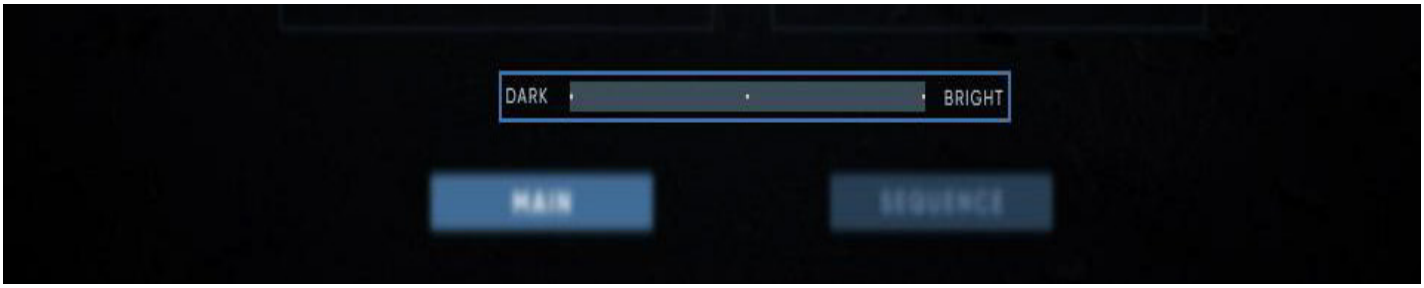
The Velocity knob controls the MIDI keyboard's sensitivity to pressure applied to the keys. A value of 0% disables the pressure sensitivity, making percussion sounds always at maximum volume.

The AHD section contains standard knobs to control Attack, Decay, and Release.

The microphone settings allow you to manually adjust the playback volume of each microphone or use the Presence slider to automatically adjust all three microphones. Moving the Presence slider to the left makes the percussion sound far off, while moving it to right has the opposite effect.



The bottom of the Main page contains a slider that changes the character of the sound. Move the slider to the left (Dark) and right (Bright) to hear how the sound changes.



The Sequence page contains the step sequencer and its associated settings. The step sequencer includes up to 16 beats, each of which can be further subdivided from two to eight. It’s activated with the switch below the table on the right.

Also below the table are the control knobs of the step sequencer. The Step knob changes the size of the sequence and the Speed knob sets the duration of one step.

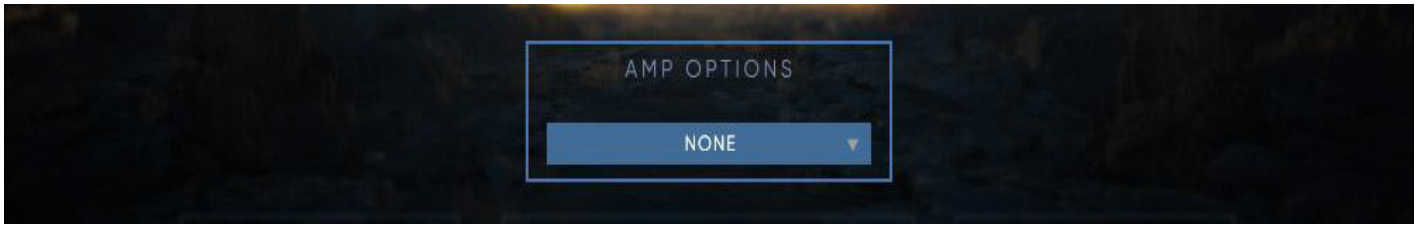
The dynamics of the sequence are controlled using either the dynamics knob or the mod wheel on your MIDI keyboard.

You can open the presets window by clicking the Presets button. There you can load factory presets as well as save and load custom presets.

ACOUSTIC GUITAR

As before, we used a performance sampling technique to capture the sounds of an acoustic guitar, giving the instrument a more human feel.

There are two additional amp options: skreamer and brilliance. Skreamer makes the guitar sound cleaner and more focused. Brilliance reduces 2-3 dB of low-mid frequencies to remove muddiness, helping the guitar sound clearer in a tight mix with many other instruments.

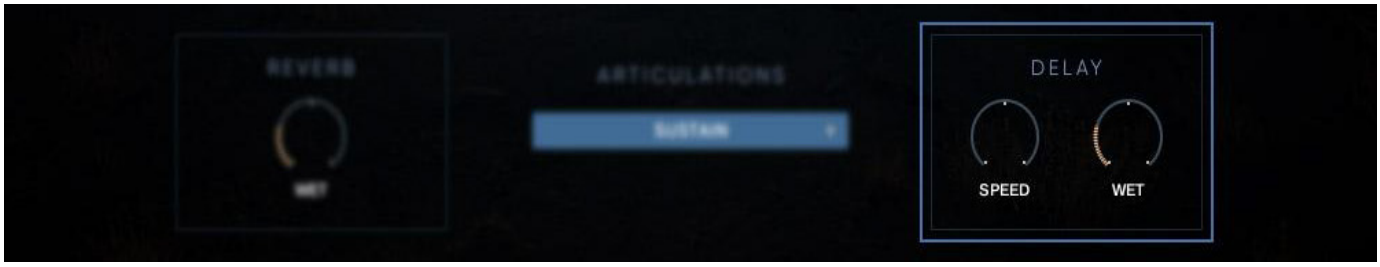


Stereo mode, better known as double track, activates the second channel featuring another guitar. These two channels are split across different sides of the panorama. The Delay knob controls the delay between them, with more delay resulting in a wider stereo image.

We recorded the guitar in two signals: MIC (line microphones) and LINE (direct input recorded signal). We personally recommend using MIC as the main signal then adding the requisite LINE signal for more substance to make the instrument sound more solid.

The guitar features numerous release noises that produce a more authentic sound. The first is activated when any note is released. The second, Scrape, is activated automatically when a virtual player changes a hand position on the fretboard or manually using the corresponding keyswitch (discussed later). You can adjust the Scrapes volume with a knob or disable all releases using the “RELEASE” button.

The Delay section contains the standard effect delay controllers. The Speed knob adjusts the delay time and the Wet knob adjusts the signal gain.



We recorded three articulations for the guitar, which are selected using the interface menu or the keys on your MIDI keyboard.

You can choose one of three stroke modes (UP, DOWN, UP-DOWN) using the green keyswitches on the left side of the keyboard. The stroke modes provide detailed control over the instrument, as the UP and DOWN modes feature distinct characters.

The red keyswitch enables/disables Infinity Mode. When this mode is on, the notes are not released, so each note continues to play until the very end or until the same string retriggers. A handy feature for live playing.

The kick and snare keyswitches activate kick and snare percussive sounds played by hitting the guitar body.

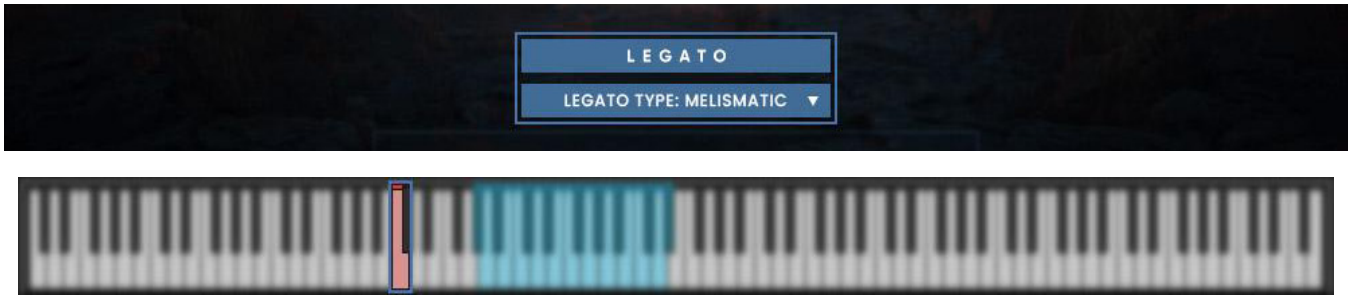
Scrape is the sound of the hand sliding on the guitar fretboard.

Strum is muted and played up-down. These two sounds are played using the two keyswitches located on the right side of the keyboard.

LUIZA LEGATO

GROTH contains two types of Luiza legato: melismatic and standard. Melismatic imparts a brighter cinematic atmosphere than standard legato, which is why we chose melismatic as the default setting.

Legato transitions are recorded for each note one octave higher and one octave lower. If you wish to play legato more than one octave higher than the current note, a standard sustain will play instead of a legato transition.



THROAT SINGING

Throat singing is an important addition to the GROTH library. We have two types of throat singing, Tibetan and Mongolian, which are combined into one patch.

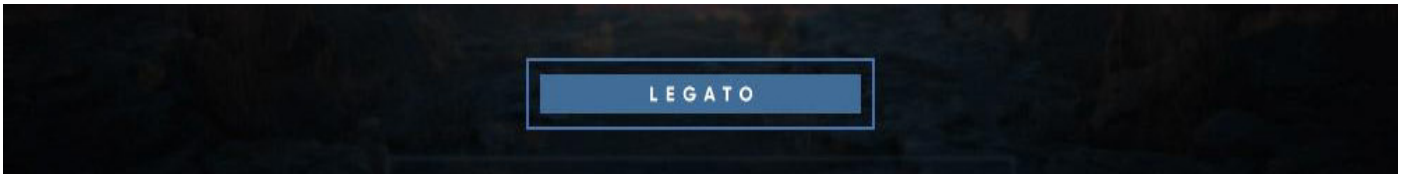
We provided the option of activating the legato transitions for this instrument if needed. However, we believe it sounds more authentic with disabled legato, which is why this is the default setting.

Soundchain is a very popular technique to use when combining throat singing with drums or rhythms. For this purpose, we added a standard LFO knob.

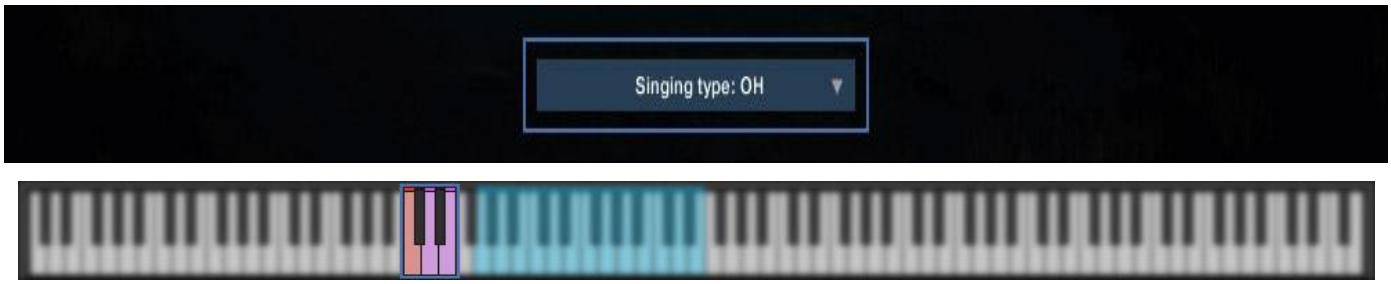
The reverb has a long tail to emphasize the deep, sacred sound of throat singing.

BOBBY LEGATO

Legato transitions work in the same way as Luiza legato.



There are three syllables available: OH, AH, and HMM. These are selected using the menu in the interface or the purple keyswitches on the left side of the keyboard.



VOCAL SEQUENCE

Vocal Sequence is a syllable voice instrument sung by two women and a man in unison. The sounds work brilliantly with the provided percussion patterns or any other rhythms.

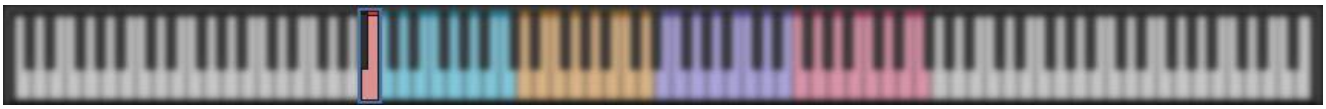
You can control the volume of the voices with the Volume knobs or mute them using the switches to the left of the knobs.

The Voice type menu allows you to choose between shouting and whispering.

You'll find the Loop settings in the lower right corner of the interface. In the Offset menu, you can set the playback delay for more convenient synchronization with the tempo in your DAW. The Speed knob allows you to quickly speed up or slow down the loop without changing the duration of each syllable.

The randomization controllers are situated to the right of the loop settings. The four numbered switches correspond to each of the four syllable sections. The bottom two buttons randomize the parameters of the sections whose switches are turned on in the randomization sections.

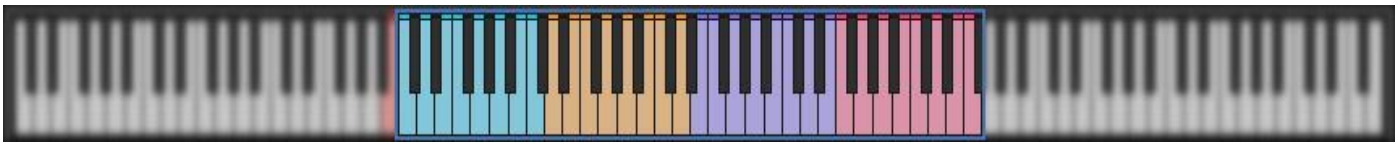
You can play the whole sequence by pressing the B0 key.



Use the Power ON/OFF switch to activate and deactivate sections in the loop.

Delete syllables by pressing the X button in the upper right corner of the syllable area. Next to that is the R button, which allows you to quickly select a random syllable from all available syllables.

Each syllable can be played with its own MIDI key. For your convenience, we've highlighted the four syllable sections in different colors on the keyboard so you can find the right key faster.



This instrument sounds more aggressive and brutal when it's pitched two semitones down.

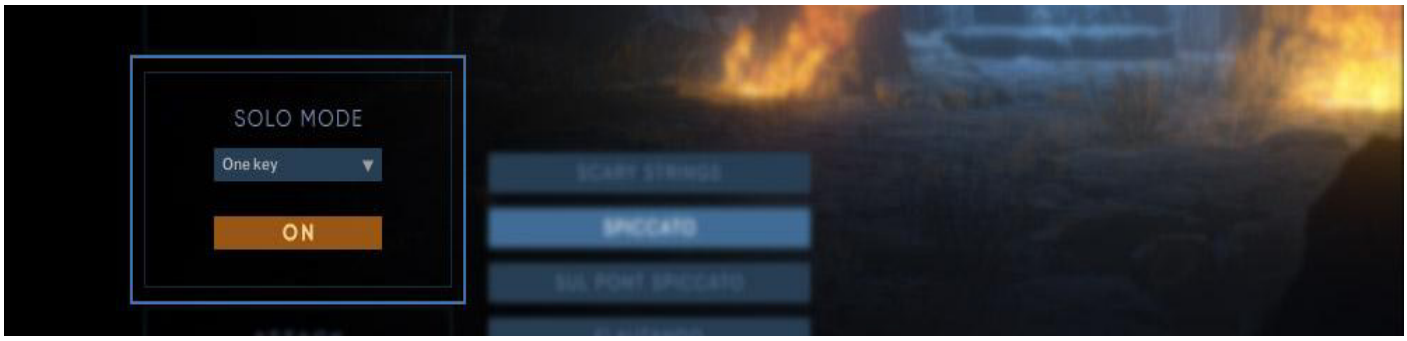
CELLO

For GROTH, we remixed our cello recordings to match the other instrument tones, and added new recordings and special articulations.

The Reverb knob controls the volume of the wet signal. Underneath is a menu where you can choose the convolution impulse or turn off the reverb.

We rebuilt the Tone menu so the settings work seamlessly with other instruments from this toolbox.

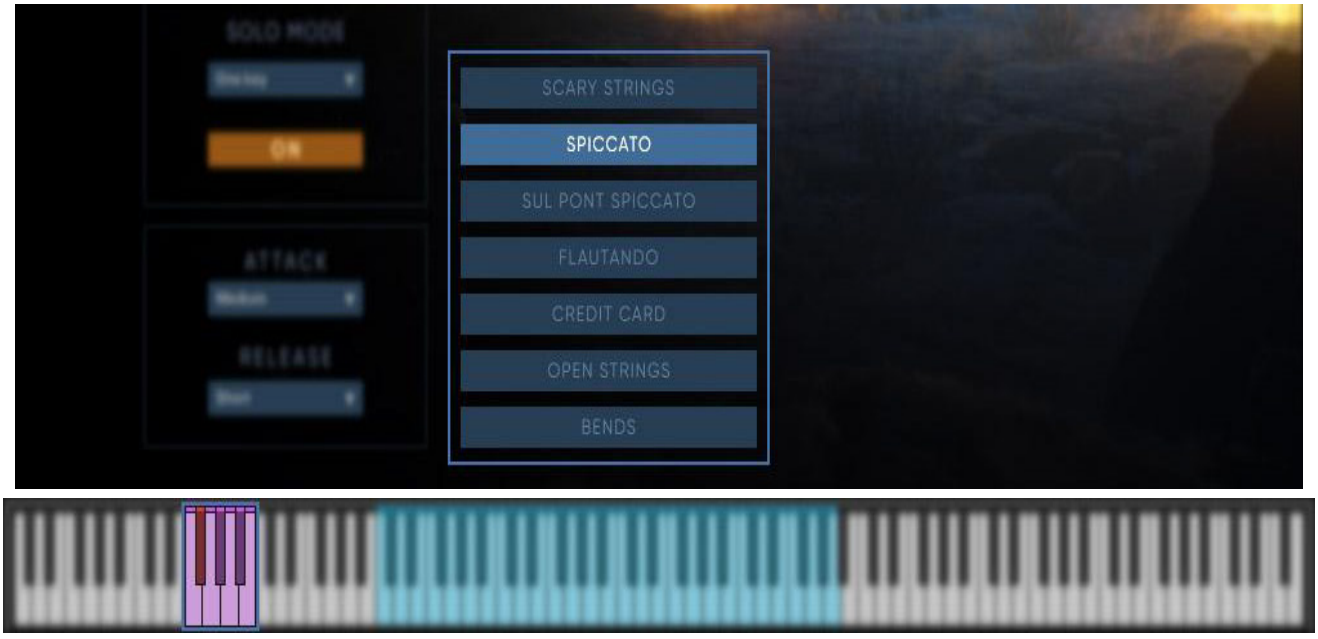
The Solo mode enables the expression of only one note at a time. When a new note is pressed, the instrument smoothly silences all previous notes. This is a very useful feature in certain situations. From the menu you can select one of the two “Solo mode" types. With the "All key" enabled, each new note silences all previous ones; with the "One key" enabled, each note can only silence the previous note of the same key.



There are three playback modes available from the attack control menu: Short, Medium, and Long. Depending on the chosen mode, you will produce a sound with a sharp or smooth attack. The attack control menu is available for the following articulations: Spiccato, Sul Pont Spiccato, and Credit Card.

Depending on the chosen articulation, you can choose from two or three playback modes in the note fade out control menu, which will make the notes fade out either sharply or smoothly. The release control menu is available for the following articulations: Spiccato, Sul Pont Spiccato, Credit Card, Flautando, and Open Strings.

You can activate an articulation by clicking LMB on the desired articulation from the list or by pressing the articulation keyswitch on the keyboard. If you want to use only one articulation, activate it from the list by clicking LMB + Alt; all other articulations will be unloaded from RAM and rendered inaccessible via the keyswitches.



DOMBRA

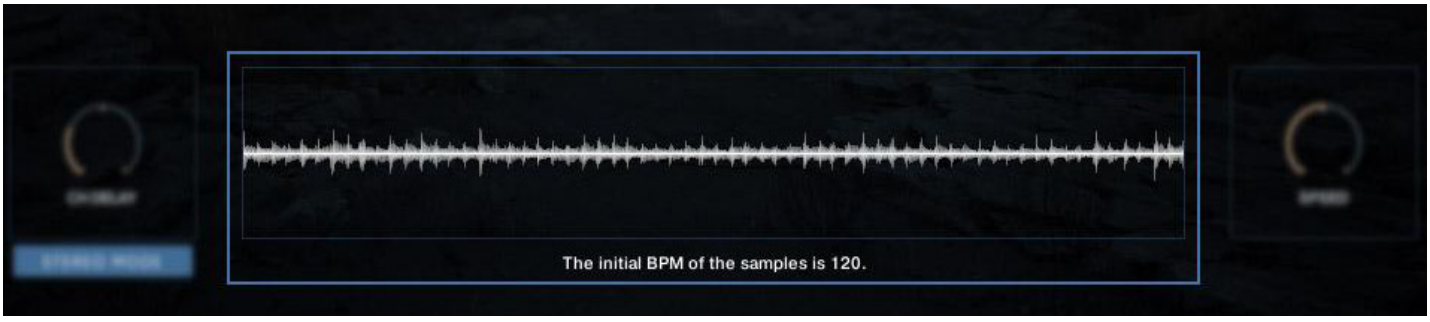
Dombra is an instrument with two strings designed to play rhythms. There are two dombra instruments in GROTH: standard and designed.

In standard dombra, the velocity controls one of the four rhythm types: x1 speed, x2 speed, x4 speed, and x4 speed playing tremolo with the fingers. Combine and mix different rhythm types to produce a wonderful, rich sound.

Designed dombra features four different rhythm types, as determined by the mod wheel: x1; x1 + x2; x1 + x2 + x4; and x1 + x2 + x4 finger tremolo.

Stereo mode, better known as double track, activates the second channel featuring another dombra. These two channels are split across different sides of the panorama. The Delay knob controls the delay between them, with more delay resulting in a wider stereo image.

The waveform is in the center of the user interface, with an information line beneath it that reflects the recommended Speed knob value. Deviating from the recommended values can cause the sound quality to seriously degrade.



The Speed knob helps to select the right speed for your project's tempo.

The lower left section contains general settings. The Stereo knob sets the width of the stereo field. Negative values close it in until the signal becomes mono at a complete counterclockwise rotation; positive values push the stereo spread outward. The Cutoff knob sets the cutoff frequency of the low pass filter.

KANGLING

Kangling is a Tibetan instrument made of human bone that's used for funerals and other rituals. It produces its most enchanting sound with a long reverb.

The Cry Tone effect makes the kangling sound more expressive. Behind this is a Cry Wah pedal, which is disabled by default but can be activated with the accompanying knob.

Warp is a special effect produced by a convolution reverb and a special impulse.

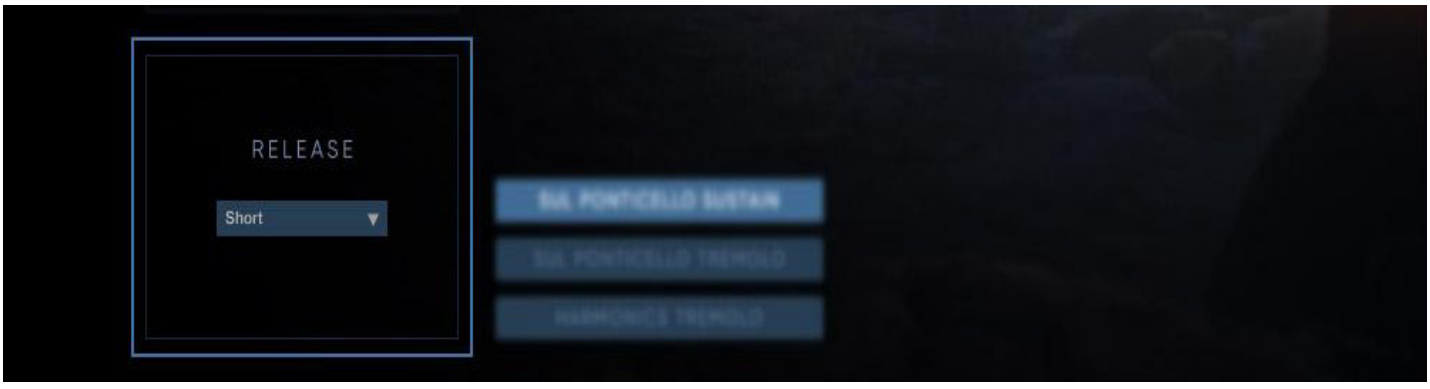
The lower left section contains general settings. The Stereo knob sets the width of the stereo field. Negative values close it in until the signal becomes mono at a complete counterclockwise rotation; positive values push the stereo spread outward. The Cutoff knob sets the cutoff frequency of the low pass filter.

ORCHESTRAL INSTRUMENTS

From the beginning of the project, we decided not to spend all our resources inflating our library with every possible orchestral articulation. There are numerous other high-quality libraries with a complete orchestra. For our purposes, we were only interested in unique articulations that sound good with other instruments. That's why we carefully selected cello and violin recordings to round out the rest of the GROTH library.

The Stereo knob sets the width of the stereo field. Negative values close it in until the signal becomes mono at a complete counterclockwise rotation; positive values push the stereo spread outward.

You can choose from three playback modes in the release control menu, which will make the notes fade out either sharply or smoothly.



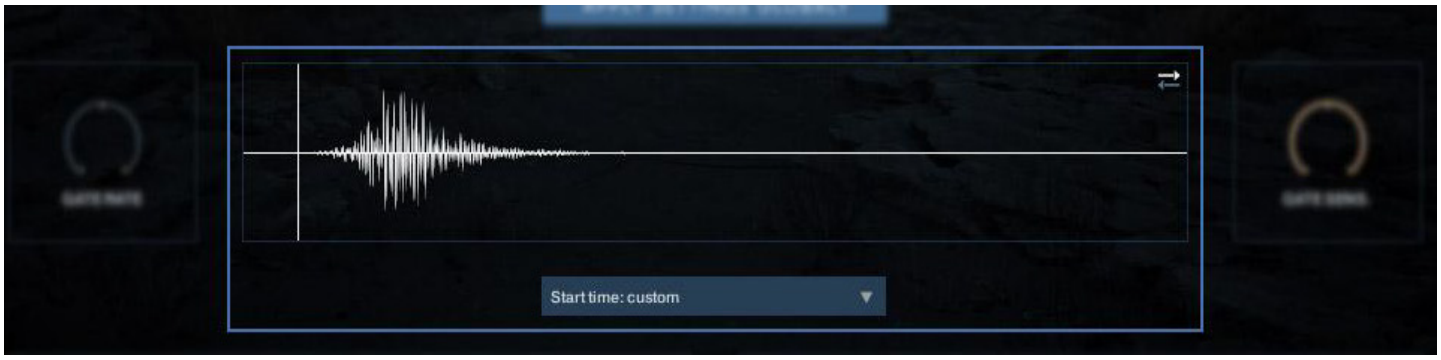
As in the Cello instrument, you can activate an articulation by clicking LMB on the desired articulation from the list or by pressing the articulation keyswitch on the keyboard. As before, if you want to use only one articulation, activate it from the list by clicking LMB + Alt; all other articulations will be unloaded from RAM and made inaccessible via the keyswitches.


SUL PONTICELLO SUSTAIN
SUL PONTICELLO TREMOLO
HARMONICS TREMOLO

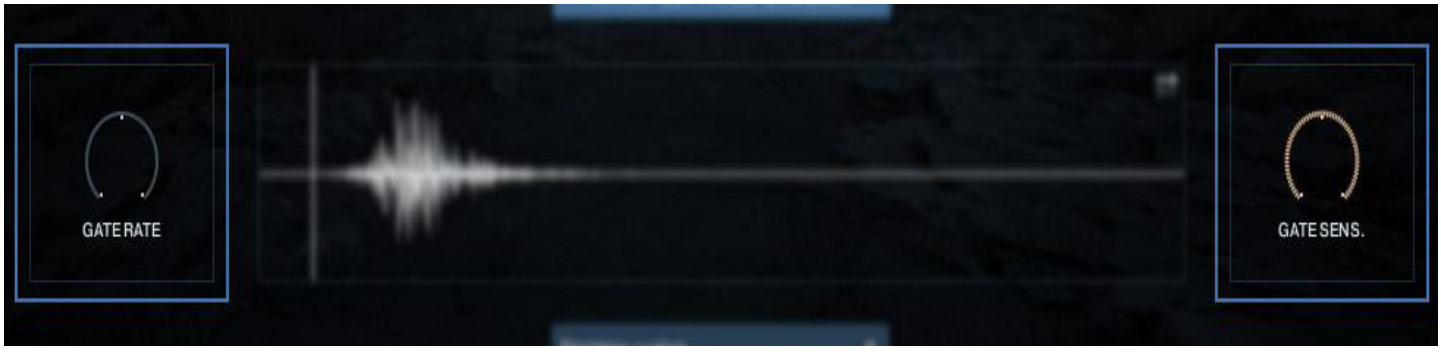
ONE-SHOTS ENGINE

Let’s start from the center of the interface, where we can see the waveform of the last played sound. In the upper right corner, there’s a switch that looks like two arrows, which reverses the playback direction.

Under the waveform is a very important menu that allows you to adjust the playback start position or synchronize it with a DAW grid. This comes in handy, for instance, to make any riser play exactly 2 bars before the hit or to make all hits play from the "hit" position without the pre-whoosh part — thus, hits are played as a percussion instrument. This important function makes working with the engine far more convenient than working directly with WAV files.



Gate is simply a rectangular low-frequency oscillator. The Rate knob adjusts the frequency synchronized with the project tempo, and the Sens knob adjusts the intensity of the LFO.



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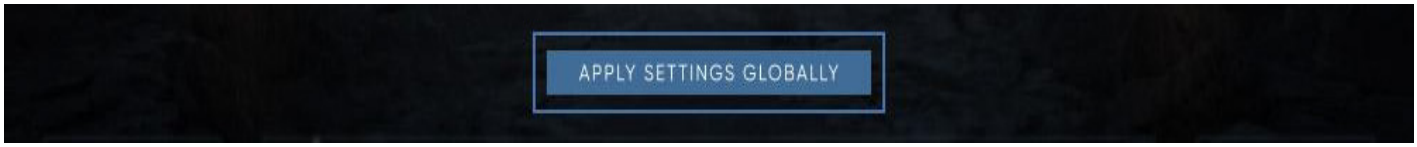
By activating the "Apply Settings Globally" switch, all settings that you change in the interface will apply to all samples, rather than just the active sample.



The left side of the MIDI keyboard has a range of keys colored red. By pressing the keys in this range, you can set the note that the loop will be played in. The selected note is green, while the note that corresponds to the active loop by default is yellow; pressing it will set the default value.

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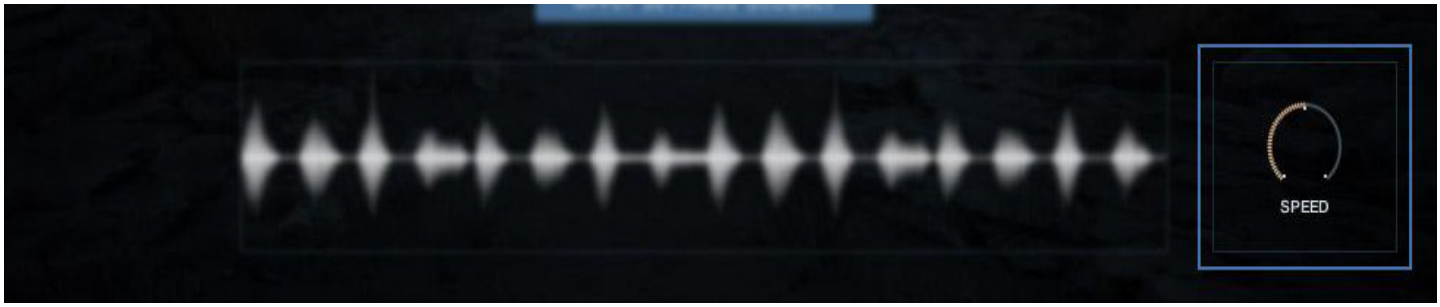

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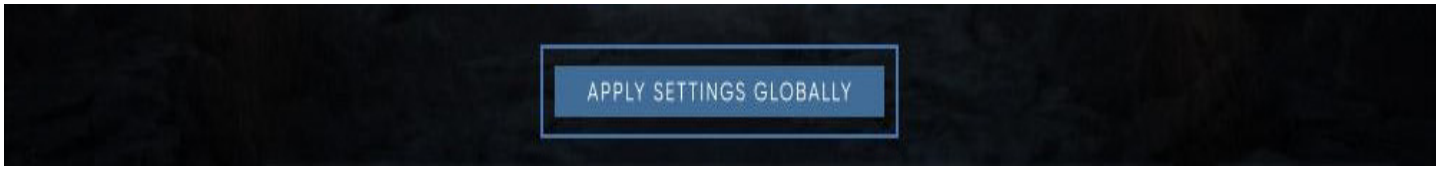

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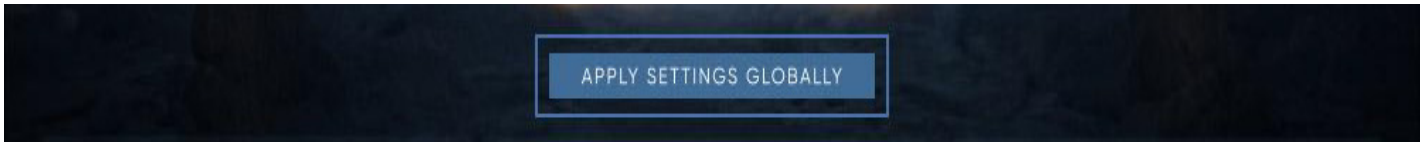
LAYERED DRONES

This instrument is designed to easily add a deep and complex ambience to your composition, providing instant inspiration.

Layered Drones consist of three layers. You can control the mixing level of each layer and disable unwanted layers.

By activating the "Apply Settings Globally" switch, all settings that you change in the interface will apply to all drones, and not just the active drone.



Activating "Playable mode" gives you the ability to play the selected drone as a tonal instrument. The available tonal range is displayed on the keyboard, and the yellow key indicates the original note of the drone.