SONIXINEMA

HANG DRUM User Manual

Note From The Creators

Congratulations and thank you for taking your time to check out our instruments and purchasing Hang Drum, a Kontakt library that explores hypnotic sounds of this unusual instrument. The performances of this exceptionally unique & mystical musical device were executed by the expert percussionist Marc Constantine. Marc is a recognised expert in his field who has been perfecting his skills since the early days of Hang Drum invention, the early 2000's. We would like you to know that we wholeheartedly appreciate your trust and support, and we hope you will find it useful and inspiring. Happy playing!

All the very best, Tomas & Louis

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Library Format and Loading

Hang Drum instrument requires Native Instruments Kontakt, version 5.8.1 and up. If you do not own Native Instruments Kontakt, you can download a FREE Kontakt Player to use this instrument.

The installed library consists of multiple NKI snapshots and Sequencer presets.

If this is the first time you are using Kontakt it is recommended that you read the Kontakt Manual.

There are TEN main patches covering an array of articulations, techniques and effects, as well as snapshots for all of the main instruments. Main instruments include *Single Hits, Muted Hits, Flams, Harmonics, Tremolo, Knuckle Warps, Pitch Bends, Spinning Hang, Side and Shoulder.*

Round-Robins

Hang Drum offers 6 round-robins (RR) per articulation. The number of RRs is global and applies to all patches.

Dynamic Layers

Hang Drum features three dynamic layers. Please see Velocity Switch and Dynamic Layers below for more information.

Microphone Positions

Hang Drum offers magnificent sonic flexibility to anyone from film score composers to music producers and even sound designers. We recorded and mixed focusing on Marcs performance and its details as well as constructing multiple perspectives, covering everything from extreme close up for those that require an upfront, closely captured textures to traditional film score perspectives. To strike the right balance we chose to record at semi-dry setting which would lend itself shaping using the HD IR's available in the engine. To achieve the set goal a total of 15 microphones were used and then mixed into a total of 5 different perspectives. Close Mono, Close Stereo, Mid, Far and separate dedicated mix which uses a combination of the microphones and some processing. All microphone position mixes are accessible via Mix Page with dedicated volume fader, solo and mute buttons.

Interface

Hang Drum interface was built specifically to accommodate this unique instrument, its character and tone. For our Experiments series we have designed a completely new interface which is unlike anything we have made before, therefore even if you are not new to Sonixinema, you will find a lot of new features and hopefully be pleasantly surprised.

New GUI allows intuitive control over its microphone positions via 'Proximity' fader that morphs between available microphone positions, as well as provides access to individual microphones. To enhance the sonic scope of *Hang Drum* we added the ability to move and shape performances further by using the 'Dynamic' fader allowing to perform dynamic changes as smoothly or as rapidly as possible with great control over the result. All of this is complemented by a large array of effects including a convolution reverb with a selection of custom designed Impulse Responses as well as natural, real lush spaces. And if this isn't enough, we designed a new performance and sound shaping arpeggiator/sequencer for the engine. It is exceptionally fun and easy to use and yields great sounding results.



Page Navigation Bar

You will notice that the main window is split into two halves, allowing the user to move between pages more intuitively when shaping the sound. The available pages on the left - Global, Mix, Sequencer. Then, Envelope and Effects page on the right. Simply click on the icon to select which page you want to see on either of the GUI sides.

To help you navigate through the parameters, there is a parameter display in the bottom left corner which will display a parameter name that you engaged with and its value.



Parameter display

A set of hints can be switched on by pressing 'F9' on your keyboard, or via Kontakt's display options and enabling Info tab. Once enabled the hits will appear at the bottom of the Kontakt interface.

Merge Subtle and Aggressive articulations together to create additional movement and power.

To see hint window press 'F9'

1. Proximity. Allows the user an 'easy mix' solution. User can move between all available microphone position mixes, from Close (fader is all the way up) to Far (fader is all the way down).

For more in-depth control over each perspective there are faders for each of them on the Mix Page where each one of the faders be Soloed or Muted, and attenuated independently. More about Mix Page below.

2. Detune. Determines the tuning of the samples. The slider moves in increments of a semitone. If alt/option is held, the user can



select a value in cents (between integral multiples of one semitone).

- 3. Expression. Global volume control.
- 4. Velocity switch (toggle button). Toggles between velocity-defined dynamic layers and manually-specified dynamic layers. If set to velocity-defined dynamic layers, then the dynamic layer is determined by the intensity at which the user strikes the keyboard. If set to manually-specified dynamic layers, then the dynamic layer is determined by the dynamic level slider.

In *Hands, Sticks* and *Springs* patches, player can manually choose how to control dynamic layers. Dynamic layers can be either triggered dependant on Key Velocity or selected manually with a cross-fader on the interface, which can be assigned to any MIDI controller for more intuitive control and/or automated in the host DAW.

In *Bowed and FX* patches on the other hand, the dynamics are set by Key Velocity only, and as name suggests it has all articulations and RR's spread across the keys, allowing the user build and produce textures with much more controlled hands-on approach.

- 5. Dynamic level. Allows the user to choose the dynamic layer manually. If the velocity switch is set to velocity-defined dynamic layers, then this control is greyed-out and inactive.

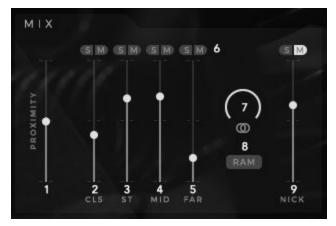
 Note: The dynamic slider is mapped to #CC1 (Mod Wheel) by default.
- 6. Stereo Width. Used to narrow down stereo field, or completely fold down to mono. Also available on the Mix Page. Default position: 100% Stereo
- 7. Blur. As name suggests this control allows the user to add some blur and roundness to the sound.
- 8. Gloss. As name suggests this parameter allows the user to add some air and gloss to the sound.
- 9. Keyswitch (push buttons). Allows the user to define which key will activate the sequencer. On key-down, the sequencer will become active. On key-up, the sequencer will wait for the release to end and switch off. If the sequencer is already on (via the switch on the sequencer interface), then the keyswitch will have no effect. If the keyswitch is pressed mid-note, the sequencer will start stepping immediately (it won't wait for the next note-on).

Default position: C0

Mix Tab

- 1- 5. Perspective Faders. Controls the level of each microphone mix/perspective. Changing the value of the Proximity fader will affect the positions of the perspective faders, but not vice-versa.
- 6. Solo/Mute (button). Solos or mutes the respective channel.
- 7. Stereo Width (knob). Used to narrow down the stereo field, or completely fold down to mono. This mirrors the value of the mono/stereo width knob on the Global panel.

Default position: 100% Stereo (Ctrl + Click snap to default)



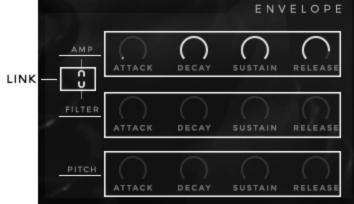
- 8. RAM switch (button). Switches between load all samples and load only required samples. If active, only the necessary samples are loaded (as defined by the Proximity and individual mic position faders). If inactive, then all samples are always loaded.
- 9. Mix. It is a combination of all the microphones, therefore it has not been intended to be used at the same time as other perspectives. But there is no reason why you can't if you want! Please note, it is not part of the proximity

Envelope Tab

Instruments sound, volume intensity and spectral content changes over time. ADSR (Attack, Decay Sustain and Release) allows you to control the shape of sound through its duration.

Attack time is the time taken for initial run-up of level from nil to peak, beginning when the key is first pressed.

Decay time is the time taken for the subsequent run down from the attack level to the designated sustain level.



Sustain level is the level during the main sequence of the sound's duration, until the key is released.

Release time is the time taken for the level to decay from the sustain level to zero after the key is released.

Amp ADSR

Full range traditional Attack, Decay, Sustain and Release controls.

Filter ADSR

Full range traditional ADRS controls. Used to control filter behaviour upon each keystroke.

With the help of the filter envelope you can determine the time in which filter is open and the time at which it will close when you press the key.

Pitch ADSR

Full range traditional ADRS controls. Used to control samples pitch upon each keystroke.

Filter/Amp Link (button)

If active, changes to the filter controls will be mirrored by the amp controls, and vice versa.

FX Tab

Effects page is divided into 6 separate areas, each of which is dedicated to a particular effects unit.

Filter Controls

Compact set of controls that affect the parameters for three different filters (*LP – Low Pass, BP – Band Pass, HP – High-Pass*). Only one is shown/modified at a time, but all three filters can be active at the same time. When ON, filter button will turn light.

- 1. On/Off (button). Turns the effect on or off.
- 2. Frequency. Displayed filter's cutoff frequency.
- 3. Resonance. Displayed filter's resonance amount.



4. Filter Select (push buttons). Determines the filter whose parameter values are displayed, and gives an indication of which filters are active. Illuminated text = filter is on.

Tape Controls

A set of controls that determine Tape Saturators parameters. Multiple saturation types are available, but only one is active at a time.

- 5. Tape Type Selector (push buttons). Determines the saturation type that is active, and whose parameter values are displayed.
- 6. Saturation Amount. Determines the amount of tape saturation effect. A = Classic; B = Enhanced; C = Transient
- 7. Degrade Amount. Determines the level of the degradation effect. Effect is switched off if knob is turned all the way to the left and automatically switches on as the knob is turned right.

Reverb Controls

A set of controls that determine the parameters of the convolution reverb.

- 8. On/Off (toggle button). Turns the effect on or off.
- 9. Reverb Amount, determines the level of reverb.
- 10. Reverb Size control. Determines the size of the reverb.
- 11. Reverb Pre-Delay. Determines the amount of reverb pre-delay.
- 12. IR Select (menu). Displays a selection of IR's supplied with the instrument. Included IR's cover a vast array of designed, experimental and natural spaces.

Delay Controls

A set of controls that determine the parameters of the delay effect.

- 13. On/Off (toggle button). Turns the effect on or off.
- 14. Delay Amount (knob). Determines the level of the delay.
- 15. Delay Time (knob). Determines the time parameter of the delay.
- 26. Delay Feedback (knob). Determines the amount of delay feedback.
- 27. Delay free/sync (toggle button). Toggles the delay time parameter units between ms and beats. If set to beats, then the time parameter is displayed/defined in beats and synced to the host tempo.

Chorus Controls

A set of controls that determine the parameters of the chorus effect.

On/Off (toggle button). Turns the effect on or off.

Chorus Amount (knob). Determines the level of the chorus effect.

Chorus Depth (knob). Determines the amount of depth in the chorus effect.

Chorus Speed (knob). Determines the speed of the chorus effect.

Sequencer Tab

We are extremely excited to present a unique sound shaping rhythm tool. Due to the nature of the sounds that *Hang Drum* can provide, they unlock an enormous number of creative paths to explore musical ideas. It comes with a number of presets categorised per note duration.

Both tools share similar functions. There are a total of up to 32 steps and each of them can be attenuated vertically and horizontally independently of each other or all together at once. To further shape the sequence you can adjust swing, change direction of the sequence, shorten, lengthen or even shift the whole pattern left or right in circles. On top of that there are two drawing modes which allow the user to draw any shape into the sequencer, or if you feel lucky hit a randomiser button and start from there!



1. On - OFF. If the Sequencer is set to ON, it will begin stepping when the number of active voices goes from 0 to 1. Similarly, it will stop stepping when the active voice count goes from 1 to 0.

If the Sequencer is set to OFF, then pressing the keyswitch (default C0) will cause it to begin stepping immediately, regardless of the number of voices active. Releasing keyswitch will stop stepping immediately. Therefore, a more complex performances are possible, as gating becomes part of your expression as and when you wish.

To move the keyswitch to your own preferred key go to Global Page and use the Sequencer Switch select function to move it up or down the keyboard.

- 2. Presets. All presets are sorted in folders and categorised by note length. Click on the folder and select pattern by double-clicking the preset. The fun part here is you don't have to leave 'Presets' window in order to see and audition the pattern. The window is transparent which allows you to see what is loaded and if Sequencer is turned on, start playing to hear the result. If Sequencer is Off, press a keyswitch (default C0) while you play.
- 3.Save. If you made a pattern you would like to save, hit save. This will take you to a new window where you can select a folder where to save. We highly recommend saving your own patterns in User folder. This way with the future updates you won't have to worry about them.
- 4. Pattern length. Determine the number of steps for you gating pattern. The Sequencer can sequence anywhere from 1 to a maximum of 32 steps. Click the last active step above the step attenuator and drag left or right to decrease/increase the number of steps. When the sequencer is running, it will wrap around to the beginning after it finishes the last step. The Sequencer will always begin stepping from the first column/step depending on stepping direction, i.e. if reverse is switched on the first step will be far right, opposed to far left if reverse is switched off.

Pattern length bar

5. Step Attenuation Amount and Duration: Sequence pattern.

Sequencer step provides triple function/control. User can set the step strength or dynamic per step, set the length of the individual step and transpose each step independently from -24 to 24 semitones.

Ability to set attenuation level per step, means users can create dynamic variations within one pattern.

Each of the steps can have step length set individually. This means step can be as short as fraction of the note length on one step, and as long as the globally set note length set in the Rhythm Tree. This also means that user can merge several steps together by turning their lengths to 100%.

See No. 9 Step-Edit / Draw Mode for pattern editing tools.

- 6. Rhythm Tree. Determines the duration of each step. Values are synced to host and range from 1/32T to 1 Bar.
- 7. Arpeggiator Mode. Drop down menu for arpeggiator behaviour setting.
 - Chord all the notes held will be triggered at the same time, based on the velocity value of each step.
 - Up all the notes held will be played in an ascending arpeggio.
 - Down all the notes held will be played in a descending arpeggio.
 - Up/Down all the notes held will first be played ascending, then descending arpeggio.
 - Down/Up all the notes held will first be played descending and then an ascending arpeggio.
 - Random All the notes held will be played in random order.
 - As Played The notes are played in the order they are triggered.
- 8. Global Step Length. Increases/decreases the step length (horizontal throw) for all steps (relative to their current value), up to the full step duration.
- 9. Global Step Strength. Increases/decreases the step strength (vertical throw) for all steps (relative to their current value), up to the full step duration.

10. Key-Arp Mix. - Determines how much the velocity of incoming notes affects the dynamics of the pattern.

At the maximum setting, keyboard velocity overrides all of the velocity settings in the ARPEGGIATOR's steps. As the setting gets closer to minimum, the velocity values of each step will determine the dynamics of the pattern. Generally, a setting of 50% is a good balance, since it allows the incoming MIDI velocity to interact with the dynamics of the pattern.

- 11. Swing. Determines the amount of swing to apply to the pattern steps. Higher swing values cause every other step to be delayed.
- 12. Step-edit / Draw Curve Mode. Toggle switch switching between Step-edit and Draw-curve modes.
- In Step-Edit mode, the user can set step length/attenuation for individual steps by clicking and dragging. Alt+cick and drag will snap to 0%, 25%, 50%, 75%, and 100%.
- In Draw-Curve mode, the user can draw patterns by clicking and dragging over the entire grid step area. The step length will be as previously set via Global Step Length or Step-Edit Mode.
- 13. Sequence Randomiser. Throw the dice, you might get lucky! Randomiser sets random pattern; step lengths and transpose will remain unchanged.
- 14. Sequence Reverse. Reverse the direction of the sequencer steps (Right-to-Left, Left-to-Right or bounce between Left and Right borders.
- 15. Sequence Shift Left/Right. Shifts the sequence left or right by one step. Values at the extreme ends wrap around when shifted.
- 16. Reset. Click once to reset the sequencer to its original state (at patch load).
- 17. Clear. Click once to erase the entire grid. Clean slate to start from scratch.

Preset List

MAIN PATCHES

01. Hang Drum - Single Hits

02. Hang Drum - Muted Hits

03. Hang Drum - Flams

04. Hang Drum - Harmonics

05. Hang Drum - Tremolo

06. Hang Drum - Knuckle Wraps

07. Hang Drum - Pitch Bends

08. Hang Drum - Spinning Hang

09. Hang Drum - Side

10. Hang Drum - Shoulder

SNAPSHOTS

Single Hits - Clean

Single Hits - Dreamstate

Single Hits - Energy

Single Hits - Fractured

Single Hits - Godsend

Single Hits - Iridescence

Muted Hits - Clean

Muted Hits - Copy Cat

Muted Hits - Dead Note

Muted Hits - Faster Master

Muted Hits - Gritty

Muted Hits - Hidey Hole

Flams - Clean

Flams - Distance

Flams - Ethers

Flams - Golden Gate

Flams - Heavy Soul

Flams - Steel Band

Harmonics - Clean

Harmonics - Don't Blink

Harmonics - Force For Good

Harmonics - Irritable

Harmonics - Storms A Comin

Harmonics - Twilight Zone

Tremolo - Clean

Tremolo - Endless

Tremolo - Far Out

Tremolo - Grains of Hang

Tremolo - Outta Space

Tremolo - Repeater

Knuckle Wraps - Clean

Knuckle Wraps - Delicate Overtones

Knuckle Wraps - Endless

Knuckle Wraps - Radiozone

Knuckle Wraps - Slapback

Knuckle Wraps - Warped Space

Pitch Bends - Clean

Pitch Bends - Down and Out

Pitch Bends - Figments

Pitch Bends - Galaxy Far Away

Pitch Bends - Junkyard

Pitch Bends - Stranger Danger

Spinning Hang - Clean

Spinning Hang - Eternal Beauty

Spinning Hang - Fall Out

Spinning Hang - Herald

Spinning Hang - Peace

Spinning Hang - Timekeeper

Side - Clean

Side - Distant Tones

Side - Fear

Side - Garbage

Side - Odd Perx

Side - Surgical

Shoulder - Clean

Shoulder - Dig In

Shoulder - Follow Me

Shoulder - Hits n Bits

Shoulder - Rhythmix

Shoulder - Squealer