p|r|e|p|a|r|a|t|o

Engine

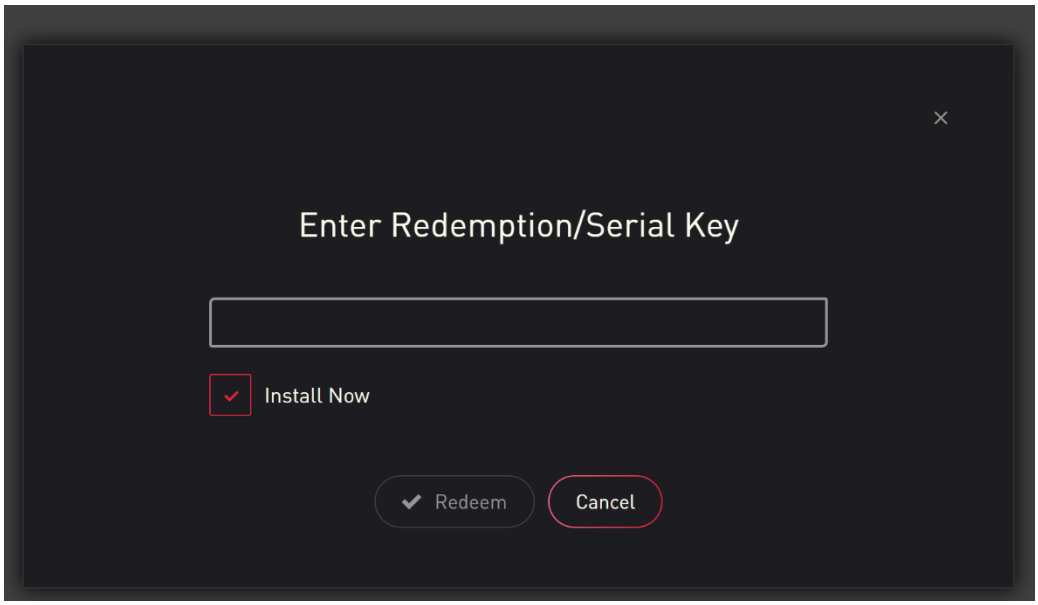
User Manual

How to install the library

1 – Install PULSE Audio Downloader (https://pulsedownloader.com/) and follow the instructions

2 – Open Pulse and click on "Add Library"

3 – Past the key code we sent to you in your e-mail



4 – Select a folder where to install the library

5 – When the download is finished, open the .nki inside the installed folder with your Kontakt version! ☺

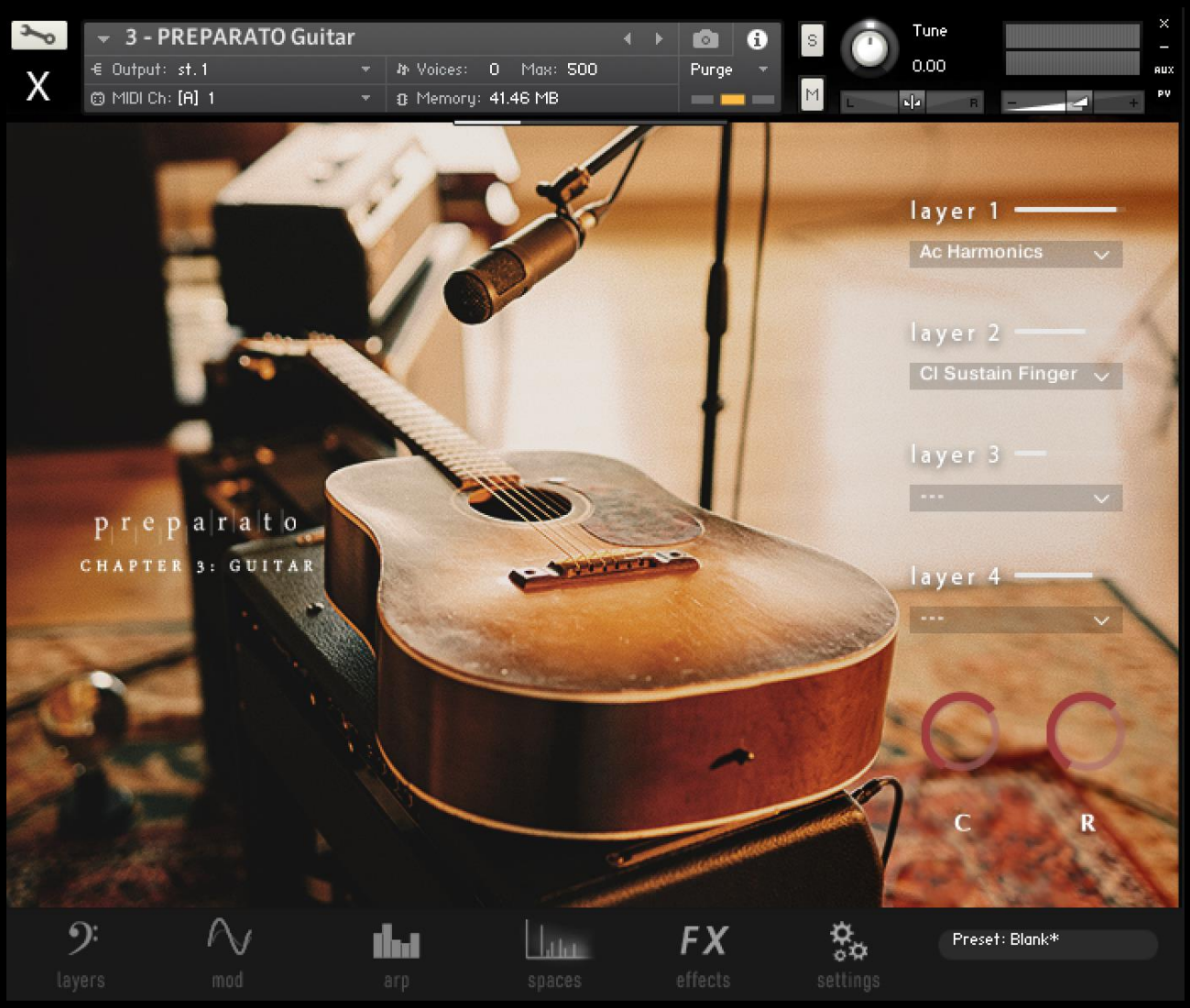
Please check Pulse monthly for updates.

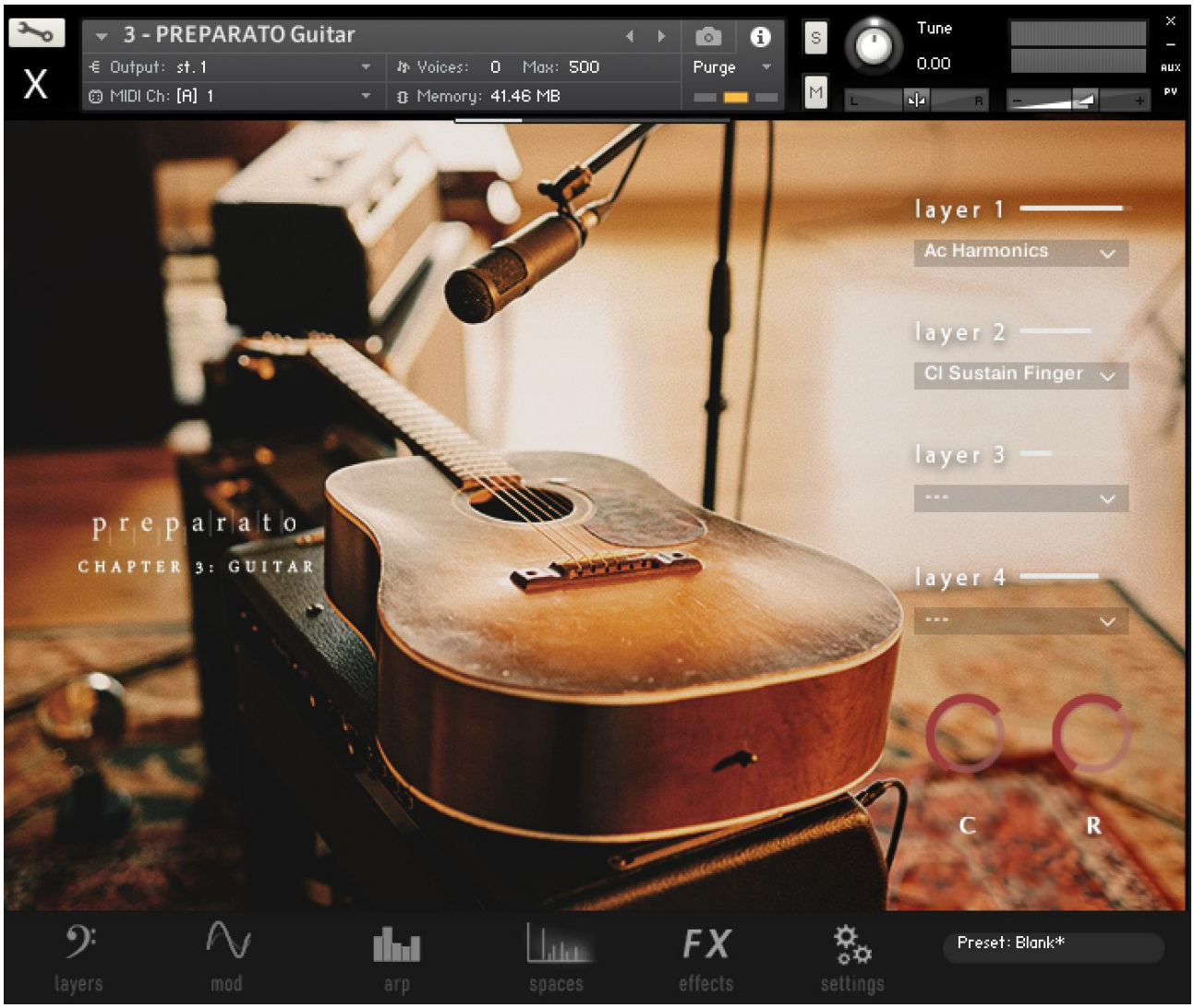
You can recall the .nki faster with the Quick-Load menu.

https://www.youtube.com/watch?v=SeXsX3Q4d7w&t=105s

for any help, write us at info@xperimentaproject.com

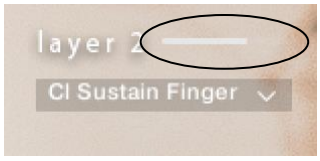
1: MAIN PAGE


3 - PREPARATO Guitar
Output: st. 1
MIDI Ch: [A] 1
Voices: 0 Max: 500
Memory: 41.46 MB
Purge
Tune
0.00
layer 1
Ac Harmonics
layer 2
CI Sustain Finger
layer 3
---
layer 4
---
preparato
CHAPTER 3: GUITAR
C
R
layers
mod
arp
spaces
FX
effects
settings
Preset: Blank*

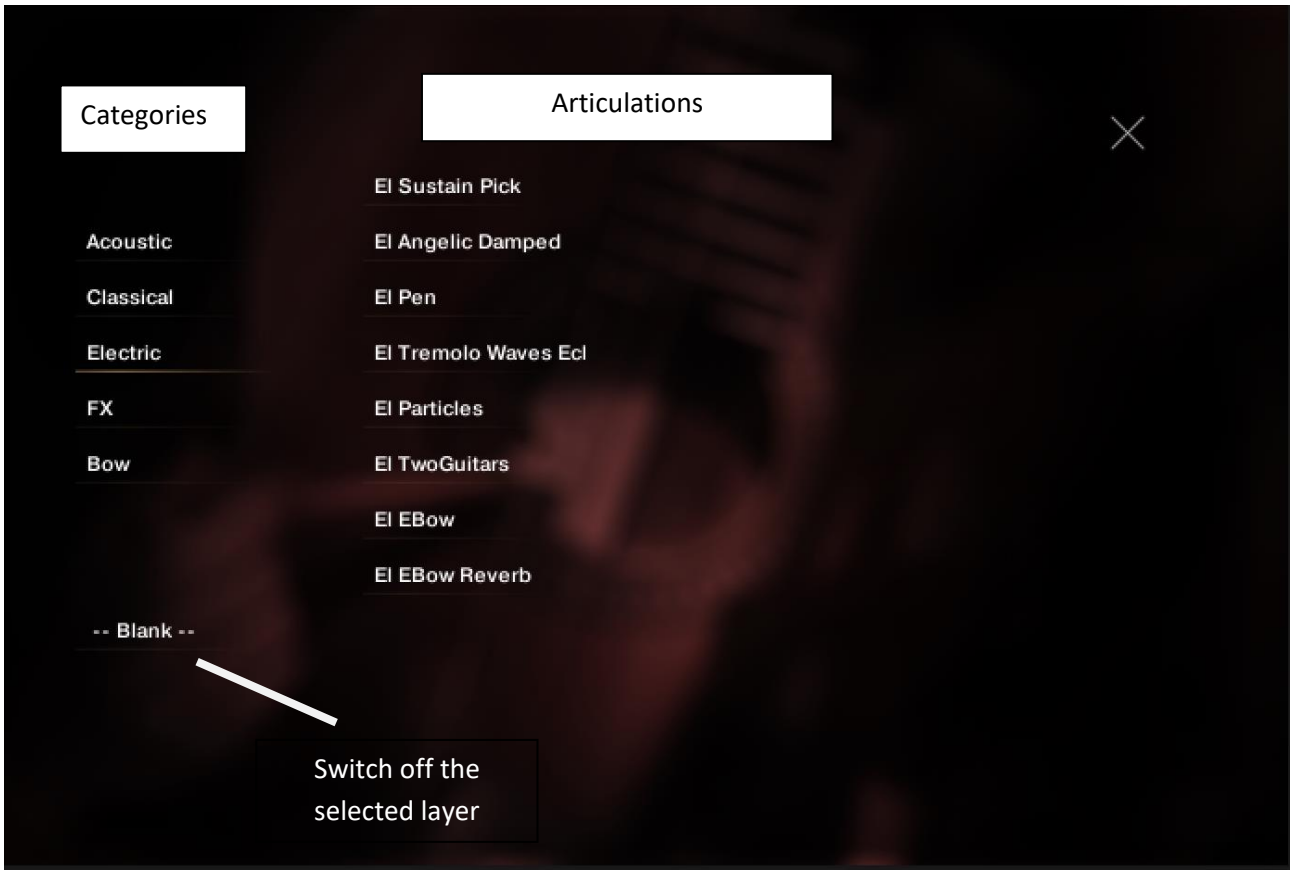


In the main page, you have access to all the pages of the instrument (the toolbar).

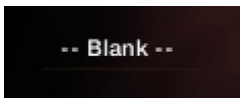
= These knobs control the volume of the Close and Room Microphone settings. You can also find “Mid” and “Mix”, a mix of all three microphones.



Here you can change the volume (market with the circle) and the articulation of the layer - by clicking on the articulation name a menu will show up.



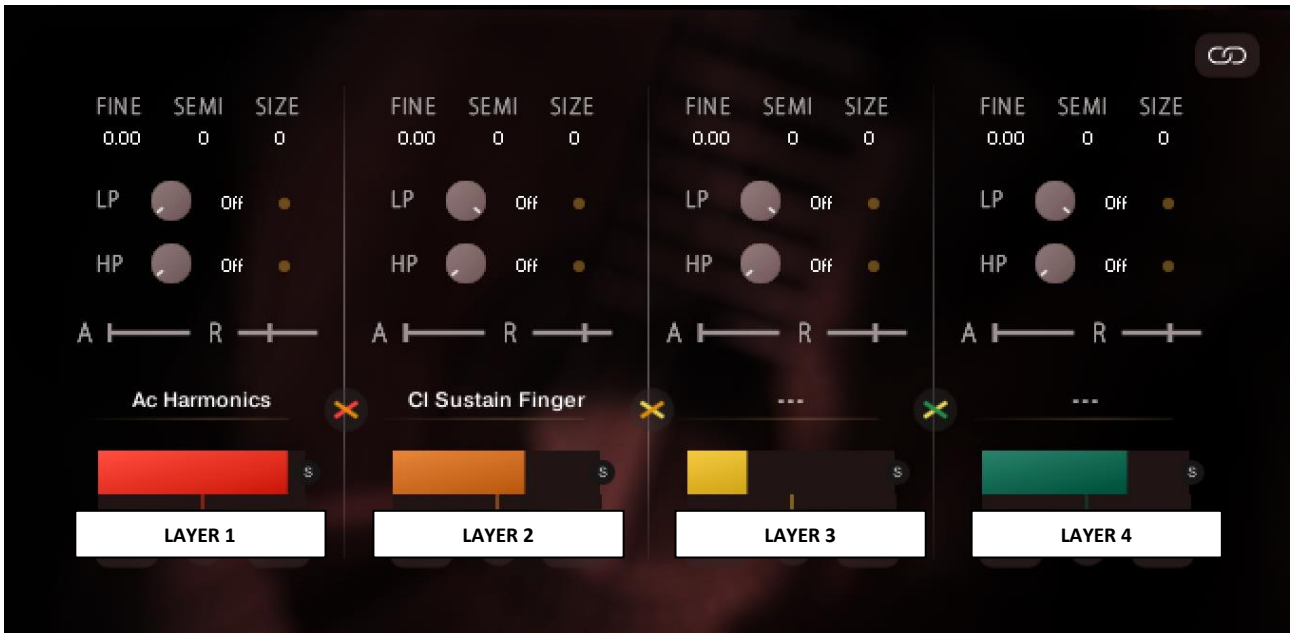
The articulation menu is quite intuitive to use:

- Switch between **Categories** on the left column
- Select the desired **Articulation** on the right menu
- Go back to where you were with
- Select an empy articulation with 

2: Layers

FINE
SEMI
SIZE
0.00
0
0
LP
Off
HP
Off
A
R
Ac Harmonics
Cl Sustain Finger

FX



Each of the Raw is a Layer, and each layer has customizable parameters and effects. The layer in this page are the same of the Main Page.

Fine: Fine tuning. By changing this number, you can adjust the fine pitch of the layer. It goes from -12 (one octave down) to +12 (one octave up).

Semi: Transpose. By changing this number, you can adjust the transpose of the layer. It goes from -24 (two octave down) to +24 (two octave up).

Size: This control adjust the formant of the layer. When Size is at +1, the note is transposed by +1 and pitched down by -1. This allows you to have a great and creative control over the sound.

"Size" more than 0: the sample is played slower, and it gives a "slow-mo" effects, like the double bass is bigger.

"Size" less than 0: the sampled is played faster, and it gives a "chip-monk" effect, like the double bass is smaller.

LP Knob:

Cutoff Frequency of the 2pole Low-pass Filter of the layer.

1 LP Switch Switch on/off the LP Filter.

HP Knob

Cutoff Frequency of the 1pole High-pass Filter of the layer.

2 HP Switch Switch on/off the HP Filter.

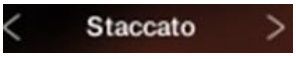
"A" Slider

A quick access to the the Attack of the layer (p.s. you can show the ADSR when pressing (9))

"R" Slider

A quick access to the the Release of the layer (p.s. you can show the ADSR when pressing (9))

---

3 Articulation 

Change the articulation of the layer. You can also navigate through them with the left/right arrows.

---

4 Volume Volume of the Layer

5 Solo Solo the Layer, in order to listen only to it. The keyboard will show only the range of the layers in solo.

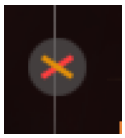
6 Panpot Panpot of the layer

7 FX Settings

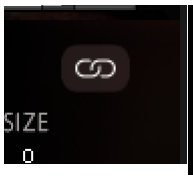
Show the FX Settings of the layer

8 Other Settings Show the General Settings of the layer

9 Envelope Show the Envelope Settings of the layer

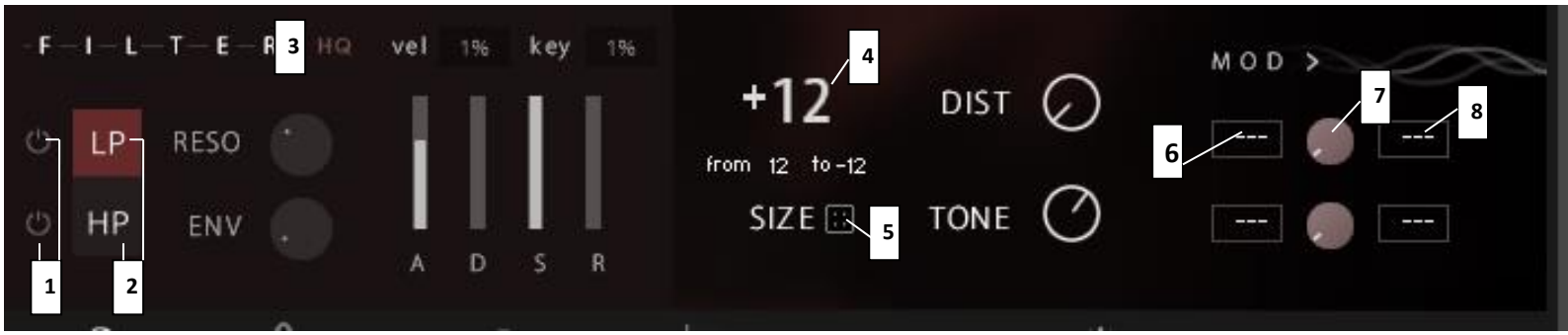
 **X-FADE Macro**

Automatically assign CC1 (Modwheel) to Volume of the two layers that the button touches. This helps you to smoothly switch between them without moving the mouse, but just the modwheel. This might be useful especially for live performances.
They can be active an all layers at the same time, try it, it is fun ☺



LINK

When Link is active, all the parameters that you touch (except for CC assignments) will be copied for all the four layers. This is helpful especially for giving a attack/release behaviour to all the instrument.



Layer: FX Settings FX

Filter

Each layer has a LP/HP filter with Envelope, Size control, Distortion, Tone and two assignable modulation.

1 Filter ON/OFF Switch on/off the LowPass (top) or HighPass (bottom) filter.

2 Show LP/HP LP HP Toggle between the filter settings of Lowpass or the Highpass filter.

3 HQ LowPass HQ Use an high-quality low pass (n.b. it takes more cpu)

Reso RESO Amount of the resonance of the filter

Envelope ENV How much the Envelope (at its right) will control the filter cutoff.

A,D,S,R:

Attack, Decay, Sustain and Release of the Lowpass or highpass filter (depending of which one is selected at (2))

Vel % Velocity. How much the velocity will modulate the cutoff freq. of the selected filter.

Key % How much the position of the note in the keybowrd will modulate the cutoff freq. of the selected filter. Note: 100% = it follows the note.

Settings

4 Size

The Size of the instrument. (see “size” at page 4).

5 Random Size

Randomly generate the size for each note. You can adjust the minimum and maximum size values by changing the the “from _ to _” numbers.
This function allows you to have more than 20 simulated round robin!

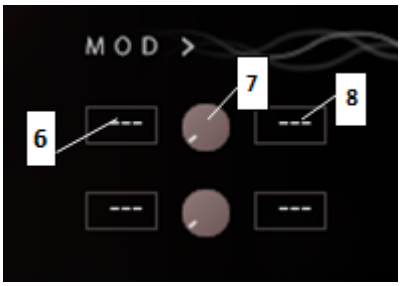
Dist

Distortion of the layer.

Tone

This knob controls a simple high-shelf on the layer set at 12,6khz.

Modulation

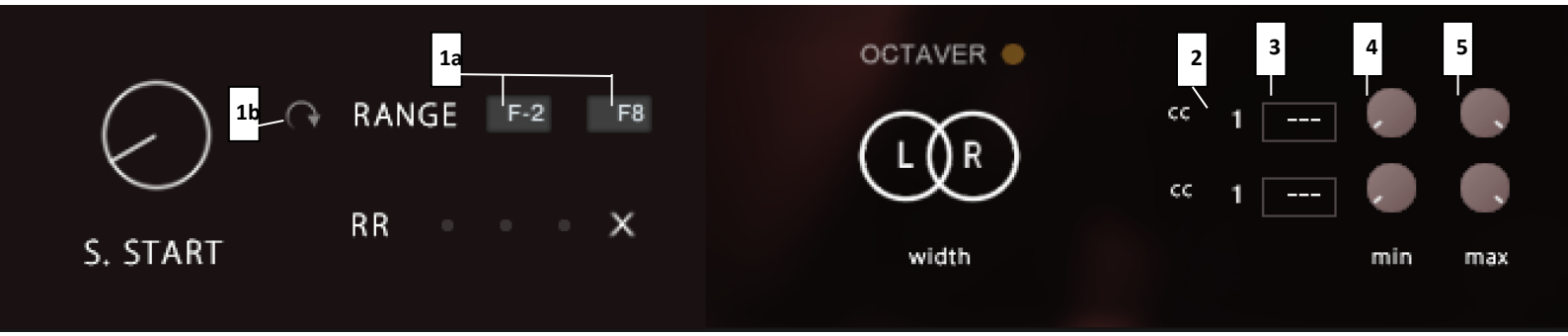


6 Modulation Source You can choose between 5 sources: LFO1, LFO2, LFO3, STEP1, STEP2. The settings of the modulators are in the "MOD" page, or by clicking the arrow just after the "Mod" label.

7 Modulation Amount How much the Modulation source will affect the target.

8 Modulation Target You can choose between 5 targets: Volume, Panpot, Pitch Tune, Highpass cutoff freq. and Lowpass cutoff freq. New: You can modulate also the Start Offset, but just with the Step Sequencer 1 and in the first Mod Slot.

Layer: General Settings



S. Start

Set the *sample start offset* of the samples of the layer.

1[a] Range

Set the lowest (left) and highest (right) note of the layer. You can go also over the highest sampled note.

1[b] Reset Range
Reset the range of the layer to its default value.

RR

With these controls, you can customize the Round Robin of the layer. Round Robin is a technique to make a realistic sampling, which consist in alternating the samples. In our library, each articulation has its own number of round robin, for a maximum of 4. Each of the control is a step of the round robin. When you click one of the led, it will show a ✕, which means that that step is skipped. If you skip all the steps, you will not hear sound! If an articulation has 2 step of round robin, the last two steps will be shown as ✕.

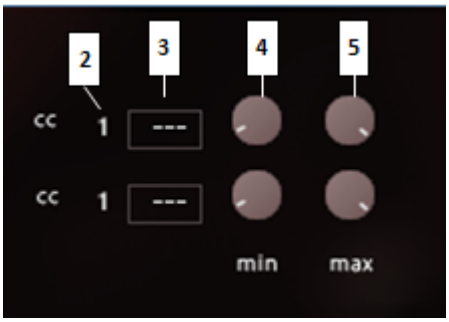
Width

A simple and useful Imager. You can change the stereo Width of the layer. When the circles are not filled, the width plugin is in bypass. Reset it with ctrl+click.

Octaver

On/Off. It Adds one-octave-low note to the played notes on the layer.

CC Settings



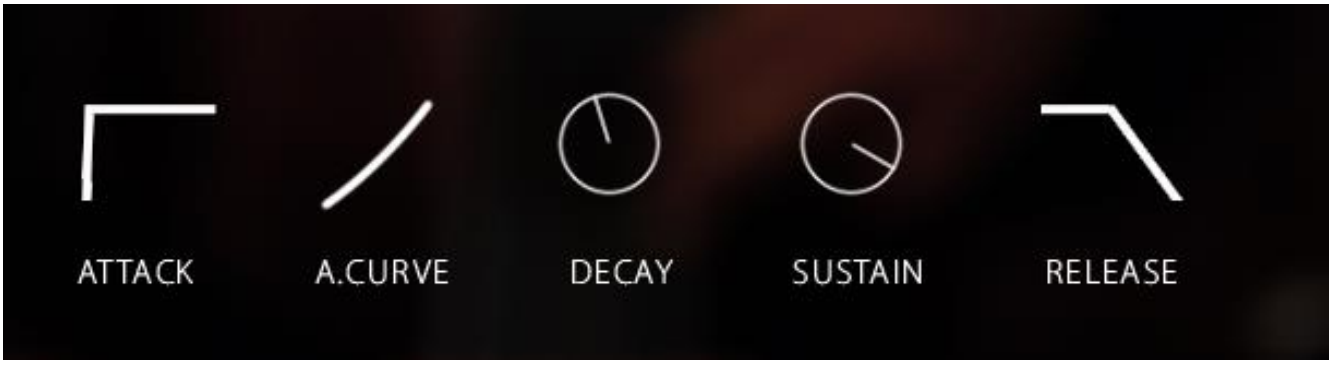
2 CC Number Set the number of the Control Change that you want to use to modulate a parameter

3 CC Target Set the parameter you want to modulate with the CC selected in (2). You can choose between: Volume, Lowpass freq., Highpass freq., Resonance, Size, Distortion, Tone (high shelf), Width, LFO1 Amount.

4-5 CC Minimum and Maximum Since the CC is going to overwrite the value, you can choose the excursion of the control change. You can also invert the behaviour, so that

when CC1 is on 0, volume is on maximum, and when CC is on maximum, volume is 0! Thanks to these features, you can create highly playable patches, useful to create great effects on live shows.

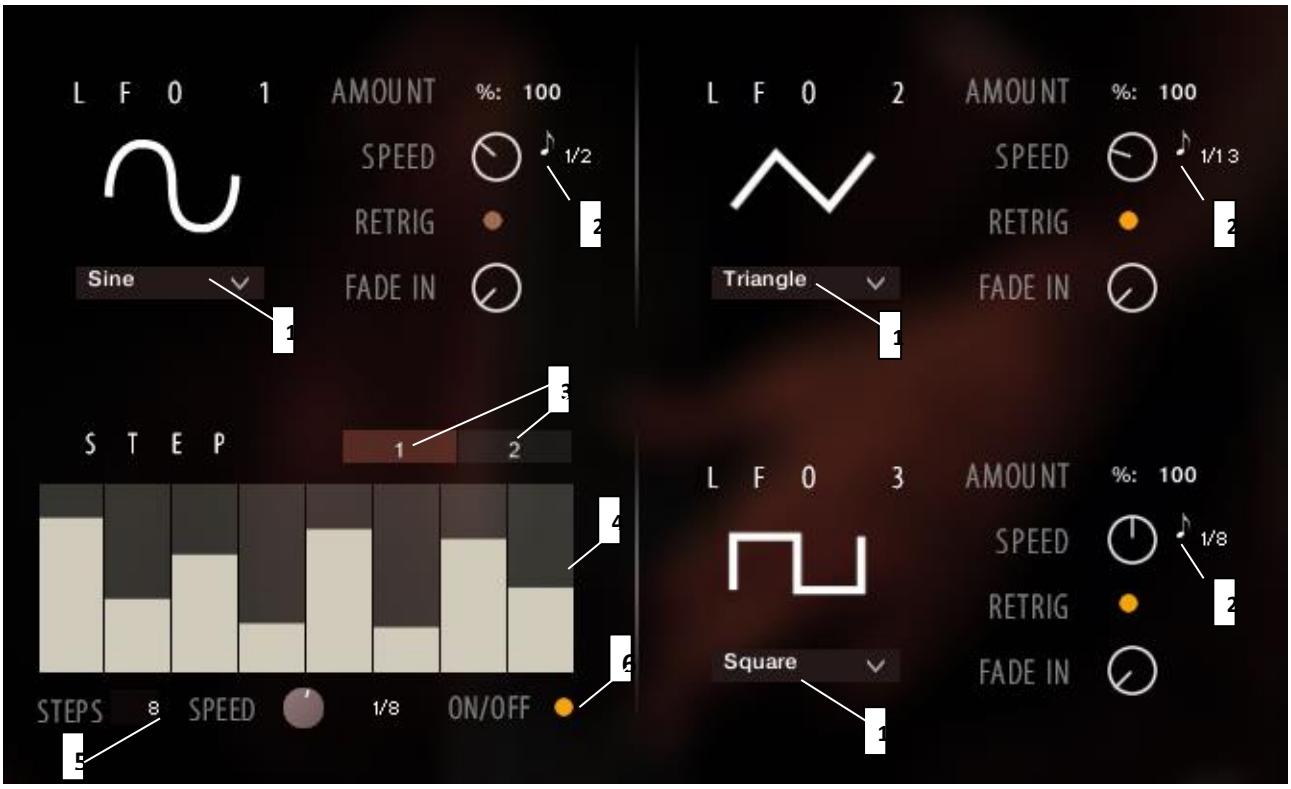
Layer: Envelope



Volume Envelope of the Layer. Nothing big to explain ☺

Attack | Attack Curve (exponential/logaritmic) | Decay | Sustain | Release.

3: Modulation



In this page you have the settings for the 3 LFO and the 2 STEP Sequencer of the instrument.

LFO Settings:

1 LFO Waveform

Set the waveform of the LFO. You can choose between Sine, Triangle, Square, Sawtooth and Random stepped.

The intensity of the LFO. It will affect all the parameters linked to that lfo.

The speedin hz/beat of the LFO. You can change the time meter (hertz or beat of your project) by clicking the little note (2)

---

2 Time It changes the time meter (hertz or beat of your project) of the LFO.

When on, an LFO will be created for each note played, so each note will be indipendent. When off, all the notes will follow the same LFO Modulation.

Note: Fade In does not work when retrigger is off.

When Retrig is on, it sets a fade in of the modulation for each played note.

Step Sequencer:

3 Step Switch

Show the settings of the Step Sequencer n. 1 or the Step Sequencer n. 2

---

4 Steps The step of the shown step sequencer.

---

5 Step number

The number of the steps. Max 128.

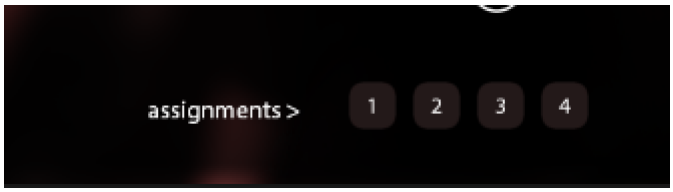
Step Speed

The speed of the selected step sequencer. Note: only in metronomic tempo. When this knob is all the way right, it will show “Max”, which is more or less 1/256.

---

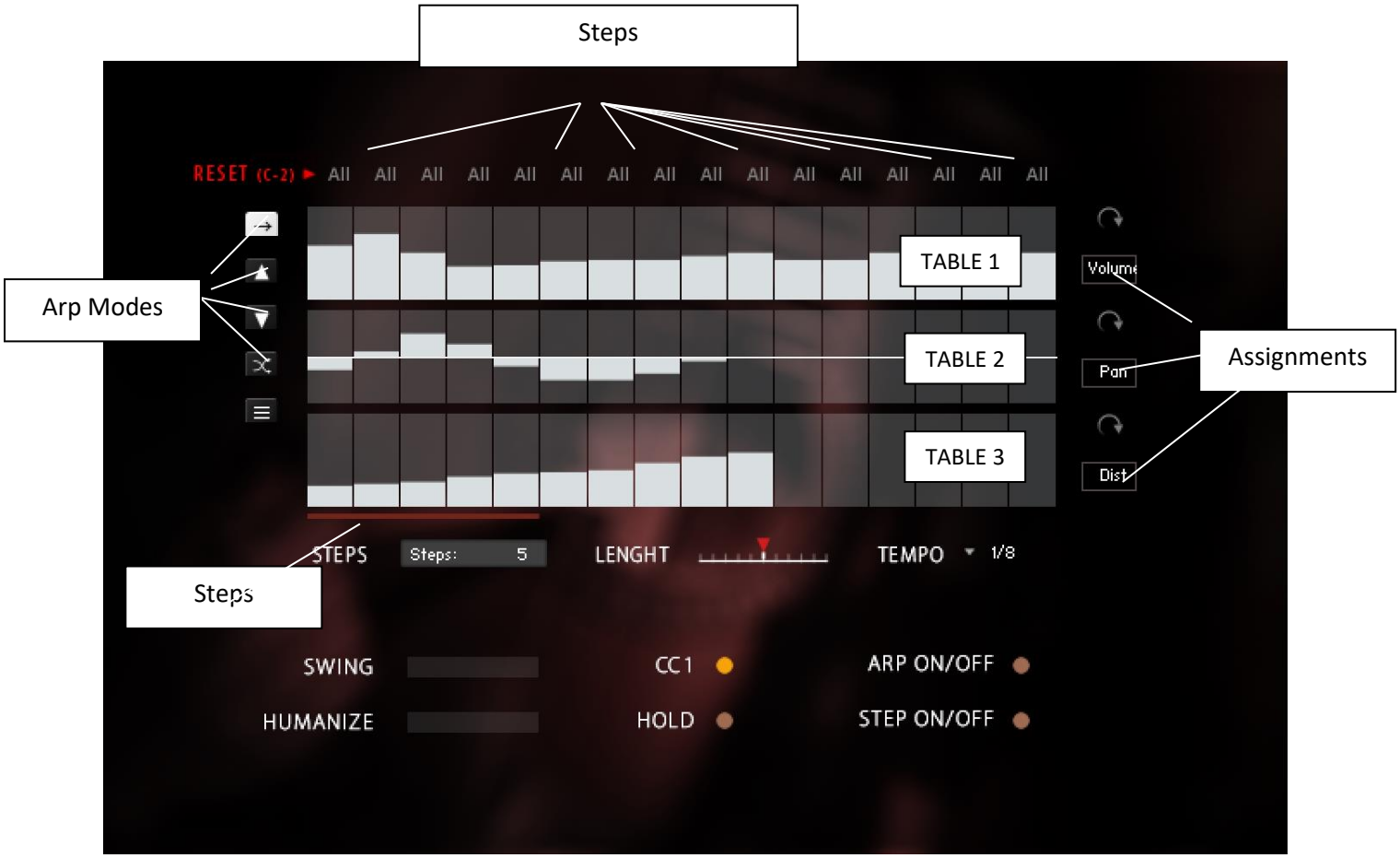
6 Step Switch

Switch on/off the selected step sequencer.



Use this shortcuts to go back to the layer assignments. They are just useful view shortcuts!

4: Arpeggiator



Part 1: Arpeggiator

To switch ON the Arpeggiator, use this led

Arpeggiator Table

There are 3 Arp Tables. Each one can be assigned to a different parameter. With this tables, you can set the each step value.

Steps

Sets the number of the velocity steps in the table. Maximum 16 steps, minimum 4. You can visually see how many steps are chosen on the red bar under the third arpeggiator.

Assignments

By clicking on the small box, you can decide which parameter will be edited for the selected table. Available parameters: Velocity, Volume, Pan, Tune, Size, LP, Length, Distortion, Layer1 volume, Layer2 volume, Layer3 volume, Layer4 volume, Send1, Send 2.

---

3 Arp Mode

The sequence of the notes follows the order you played it.

The notes are played from the lower to the higher

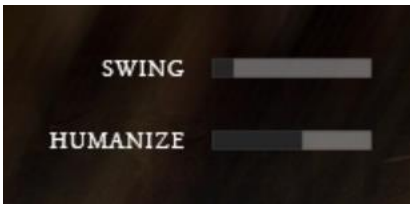
The notes are played from the higher to the lower

The notes are played in random order.

The notes are played all togheter

4 Lenght The length of the notes. At low values, you will have a “staccato” effect.

5 Tempo Here you can decide the tempo of the arpeggiator.
I.E. if time is 1/16, the software plays one note every 1/16. The tempo is dependent on your project bpm.



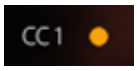
Swing : Sets the amount of swing of the tempo.

Humanize : This parameters allows you to randomize a bit the tempo. When Humanize is to 0, all the steps are be perfectly on grid.

Switch On Arpeggiator

Hold

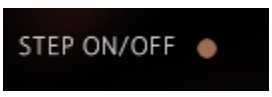
When HOLD is on, the arpeggiator will continue to play, also when you release the hand from the keyboard. The sequence of the notes is reset each time you press new notes after no key was pressed.

CC1 Dynamic 

When this LED is on, you can control the dynamic of the step with the Modwheel. This fader will appear on the right of the arpeggiator, that you can control also with mouse.

Part 2: Steps

To switch ON the Steps function, use this led



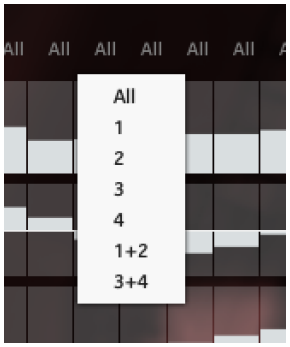
(note, is note releated with the step sequencer in mod)

The “Step” function allows you to assign the notes in a sequence to a different layer. The Current step is shown in yellow (

) on the top of the arpeggiator. The number of steps used can be changed with

Steps and Arpeggiator are difference functions, but they can work together.

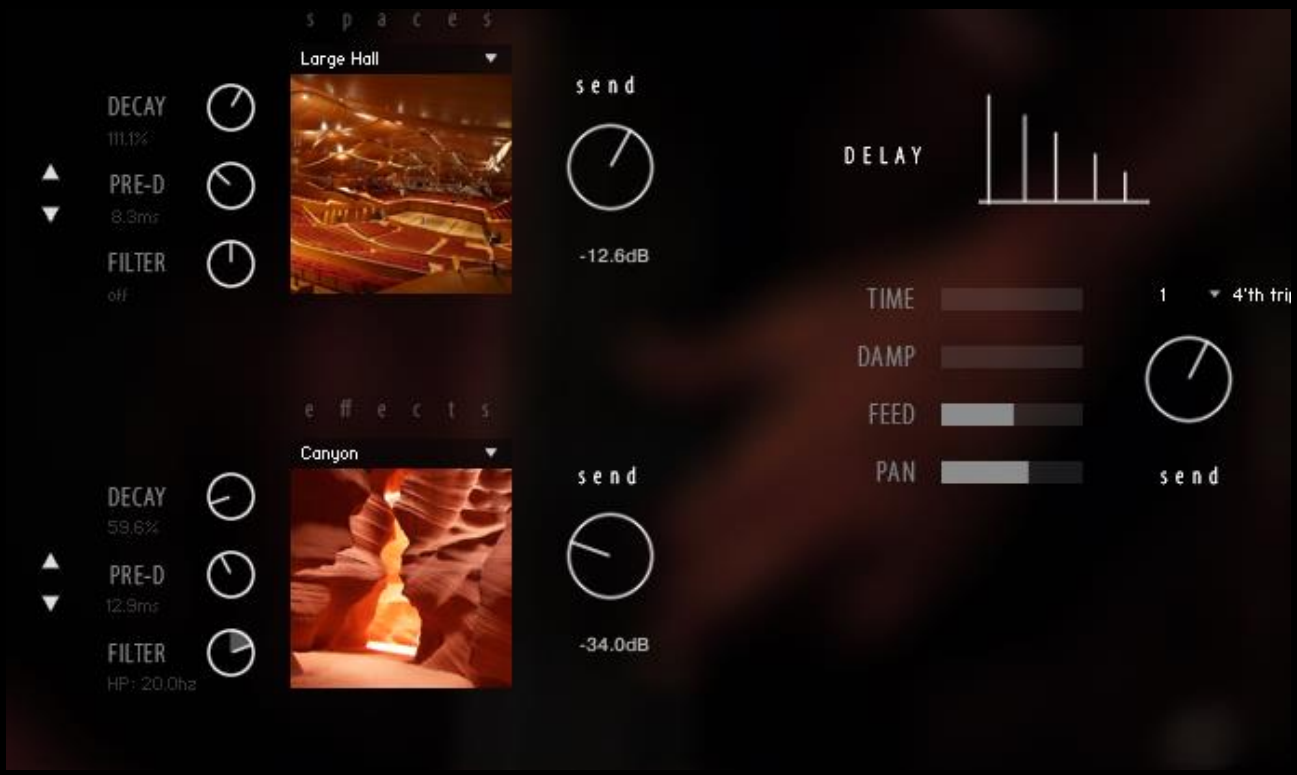
When arp is off, the next step will be triggered for each note played.



Here you can change the layer to the steps, by clicking on them. A menù like this will appear .

- 1 = Assign the step to the layer 1 (so you will hear just the first layer)
- 2 = Assign the step to the layer 2 (so you will hear just the 2nd layer)
- 3= Assign the step to the layer 3 (so you will hear just the 3rd layer)
- 4 = Assign the step to the layer 4 (so you will hear just the 4th layer)
- 1+2= Layer 1 and layer 2 will play
- 3+4 = Layer 3 and layer 4 will play
- ALL = The step is assigned to all layer (so it work as normal)

5: Space. Reverb & Delay

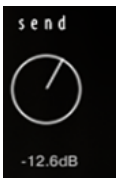


Part1 : Convolution effects

>>> Convolution 1
Natural spaces and reverb machines.

>>> Convolution 2
Special effects, creative IR.

Send



The amount of effect.

Type

Choose the impulse responce.

When Type is on Digital Delay, another effect is activated (so it's not anymore convolution reverb, but algorithmic). If you are a little bit expert, you can change the settings of the algorithmic reverb by going into the patch settings.

These are the parameters set by default:

Decay

The size of the reverb. It stretches the length of the impulse responce, and it goes from 50% to 150%

Pre-Delay

The Pre-Delay of the reverb. (the time between the direct source and the first reflection of the reverb).

Filter

A Lowpass/highpass filter on the impulse responce. When it goes to the right, it applies an high-pass filter, when it goes to the left, it applies a low-pass filter.

NOTE: The responce of this knob is a little bit slow.

Part2 : Delay

1 Send The amount of the delay.

1 Time Beat/ms You can choose the time unit between *milliseconds* and *tempo values* (1/4, 1/8, etc.) based on your project bpm.

Time The speed of the delay, so the time between one reflection and the next one.

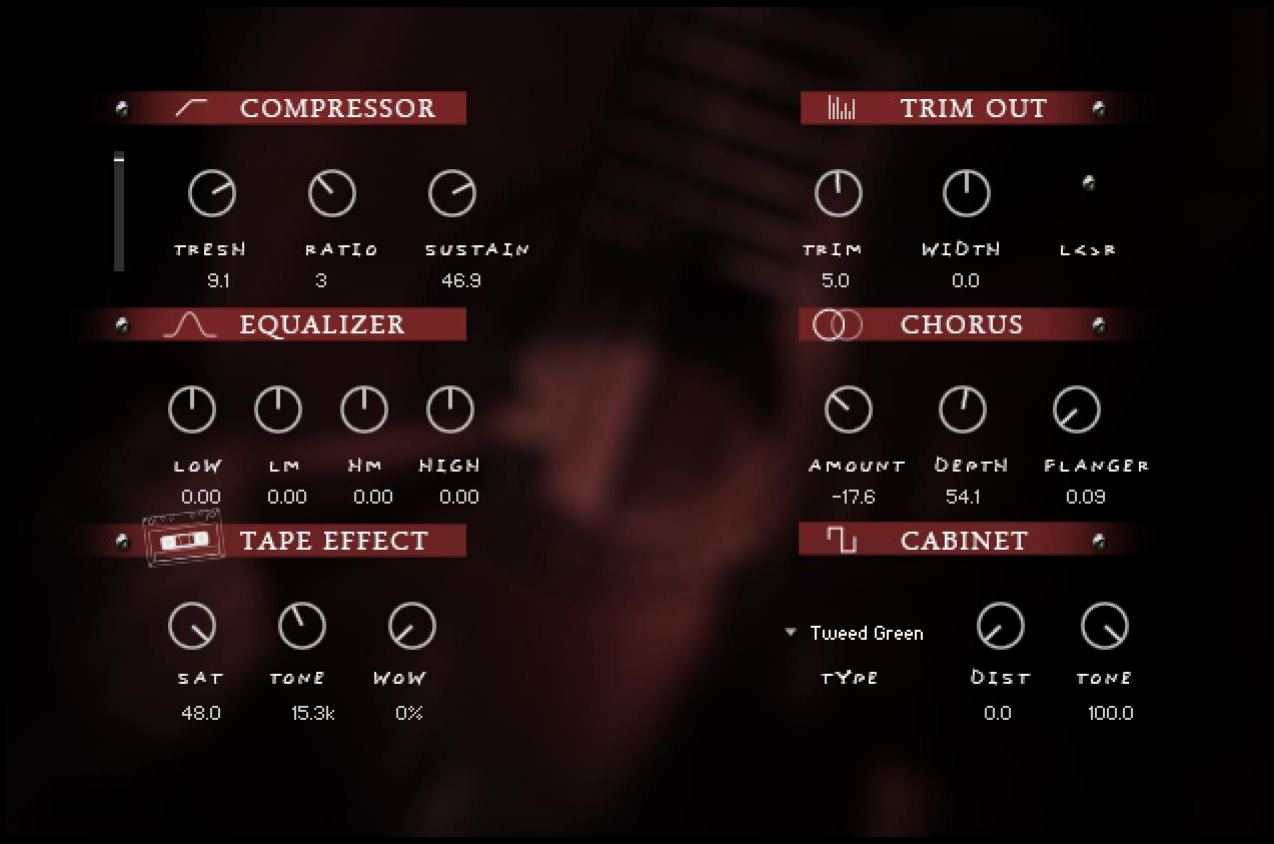
NOTE: When (1) is set on a beat tempo value (i.e. 1/8), this fader needs to be set on 1!

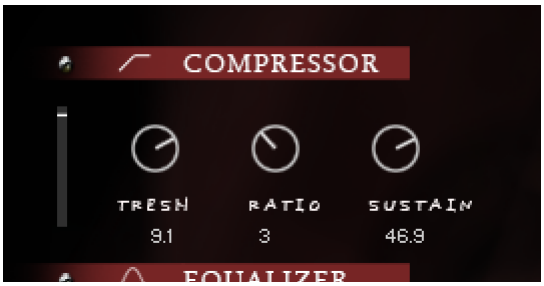
Damp The damping (lowpass-filter) of each reflection

Feed The feedback of the delay.

Panpot The stereo image of the reflection. At maximun, you will have a ping-pong effect.

6: Effects


COMPRESSOR
TRESH
9.1
RATIO
3
SUSTAIN
46.9
EQUALIZER
LOW
0.00
LM
0.00
HM
0.00
HIGH
0.00
TAPE EFFECT
SAT
48.0
TONE
15.3k
WOW
0%
TRIM OUT
TRIM
5.0
WIDTH
0.0
L<>R
CHORUS
AMOUNT
-17.6
DEPTH
54.1
FLANGER
0.09
CABINET
Tweed Green
TYPE
DIST
0.0
TONE
100.0



Threshold: sets the threshold of the compressor. More this value is low; more the sound is compressed. On the left, you can see on the meter how much the compressor is reducing.

Ratio: sets the "ratio" of the compressor. More this value is high; more the compression will be "punchy".

Sustain: this knob controls a *Transient Shaper*: More this value is high; more the sound will have sustain and punch.

A simple and useful Equalizer.

Low: less/more low frequencies (low-shelf @ 125hz)

LM: less/more low-mid frequencies (475hz, wide Q)

HM: less/more high-mid frequencies (2khz, wide Q)

High: less/more high frequencies (high-shelf @ 5.7khz)

The “Tape Effect” rack simulates an analog distortion of a tape recorder.

Sat: sets the gain of the “*Tape Saturator*”, which adds a musical distortion.

Tone: sets the high-cut filter of the saturation.

Wow: this parameter adds a slow modulation to the pitch, like an old broken tape.

We replaced the Lo-Fi with the more useful TRIM OUT Module.

Trim: Set the main out volume.

Width: sets the stereo with of the main out.

L<>R: Switch Left and Right Channels.

Amount: controls the send amount to the chorus effect.

Depth: sets the depth of the modulation.

Flanger: the amount of the flanger.

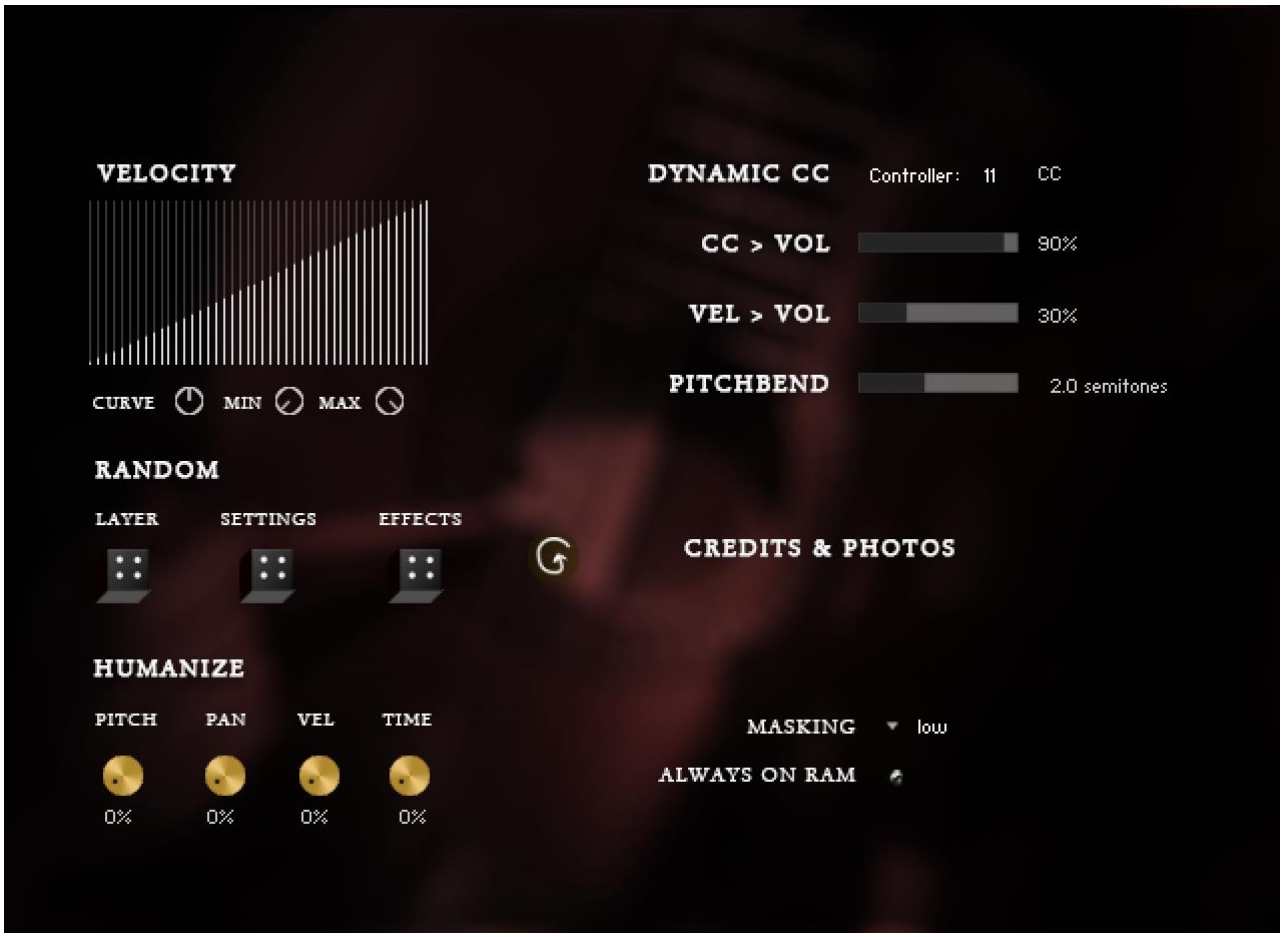
The “Cabinet” rack simulates the response of a cabinet, and it features a screamer type distortion.

Type: You can choose the type of the cabinet to simulate. The available simulations are:

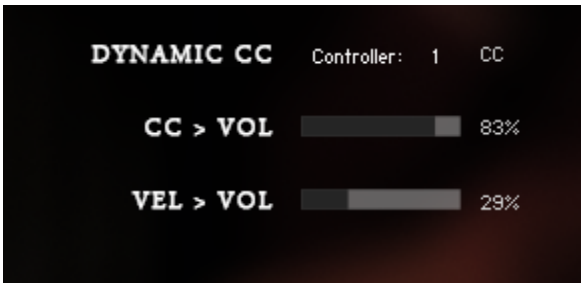
Tweed Green, Brit 60s, V30, V30 Back, Tweed, Tweed (Far), Uk 70s, Uk 70s (Far), Bass-WR, Bass-WR(Horn), Leslie 122.

You can bypass the cabinet simulation by choosing “Off”.

Dist: sets the amount of the screamer distortion.


VELOCITY
CURVE
MIN
MAX
RANDOM
LAYER
SETTINGS
EFFECTS
HUMANIZE
PITCH
PAN
VEL
TIME
0%
0%
0%
0%
DYNAMIC CC
Controller: 11
CC
CC > VOL
90%
VEL > VOL
30%
PITCHBEND
2.0 semitones
CREDITS & PHOTOS
MASKING
low
ALWAYS ON RAM

Dynamic CC The control change that you want to use for the Volume dynamic of the instrument. Default on 1 (modwheel).

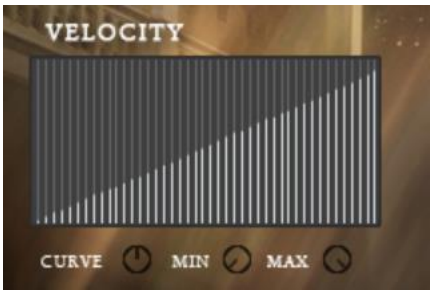


CC > Dyn How much the control change set on "dynamic cc" will affect the volume of the instrument.

Vel > Dyn How much the control velocity will affect the volume of the instrument.

Sets the amount of the pitchbend modulation in semitones. This works on all the layers.

Velocity



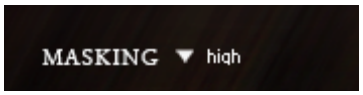
In this area is possible to change the velocity curve in input. With *Curve*, is possible to change the velocity curve from an exponential response to a logarithmic: use this parameter to fit the response of the instrument with the response of your keyboard.

You can also set a *minimum* and *maximum* velocity value.

Humanize In this area, you can "humanize" your sound by adding some random parameters.

- **Pitch:** Randomizes the pitch of every note.
- **Pan:** Randomizes the panpot of every note.
- **Velocity:** Randomizes the velocity (useful with Arpeggiator on)
- **Time:** When on, it adds a little delay, latency to every note. The time of the delay is random, from 0 to the value of this parameter. You can appreciate this effect while two or more instrument are in layering.

Masking PREPARATO has an engine that suppress the unused voices with transparency. In example, if you play the same note a lot of time, the software will gently suppress the oldest ones. This is crucial to contain the CPU usage of the instrument.

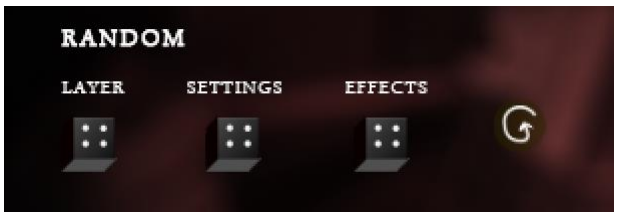


You can choose between “Low” masking (less suppressed voices), “Normal” and “High” (best CPU performance)

Always on Ram

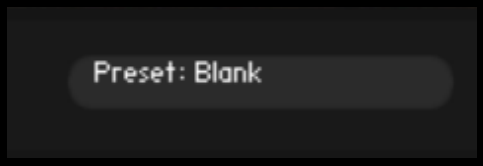
If “Always on Ram” is on, the instrument will load all the samples of the techniques (and not only the one in use).

- *On*: All the samples are loaded, depending only on the settings of the microphones purge. It helps to save time when loading a preset / change a layer technique. Needs RAM resources.
- *Off*: Only the samples in use are loaded. Save a lot of RAM, but needs time to load a preset or a layer technique.

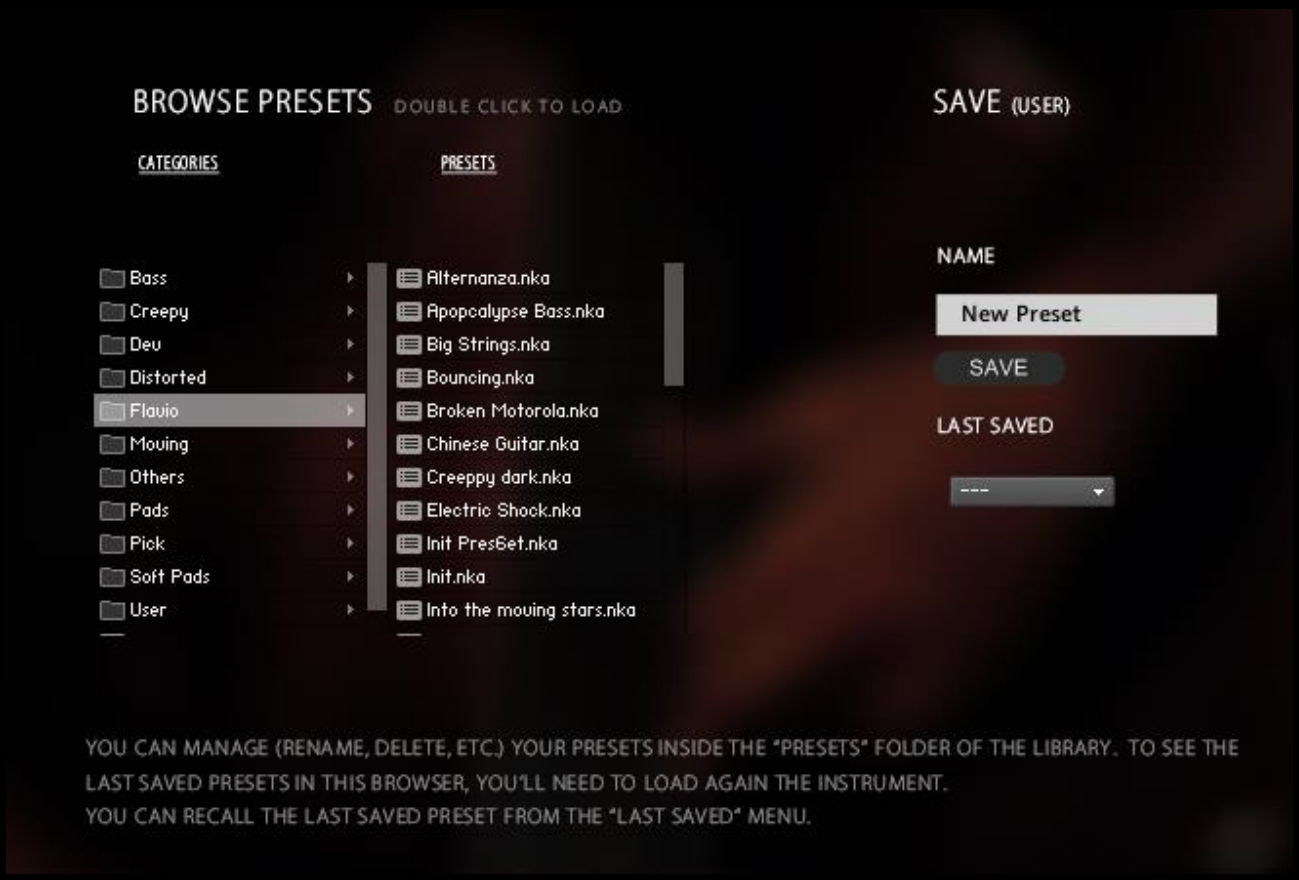


Create a random Patch. If you made a mess, use the reset button (on the right) to come back to the default patch. **NOTE: IS NOT POSSIBLE TO UNDO THE CHANGES.**

: Scroll the photos and enjoy ☺



Presets



In this page, you can load and save your favorite presets.

p|r|e|p|a|r|a|t|o

The presets are saved inside the “Presets” folder in the library, as .nka files. You can rename, delete and manage the files manually.

The presets are divided by categories. The preset that you save will go into the “User” Folder.

How to load a preset

Double click on the .nka file in the “Browse presets” control.
It needs some time to load. Rarely, it can happen that the load fails; in this case just try to load again the preset or to close and open again the instrument.

The loading process works better when “Always loaded” in settings is On. Otherwise, the software will need to unload and load the samples again.

If the loading process fails often, please contact us at *info@xperimentaproject.com*

How to save a preset

To save a preset, choose the name of your preset in the “Name” textbox, and then click on “Save”.

The software saves the custom presets in the USER folder.

If the preset file already exists in the User folder, it will be replaced.

IMPORTANT

When you save a preset, you will not find it in the Browser “User” folder until you close and open again the instrument. This is because Kontakt updates the file browser only at the start of a new session of an instrument.

To recall a preset you just saved in the same session, use the *Last Saved* menu. Inside this menu you will find all the presets you saved in the same session.

After you close and open again PREPARATO, you will find all your presets in the “User” folder.

If you have some trouble with this browser, please use **Snapshots** or contact us for further information.

PERFORMANCES

Please note that the Acoustic Modular Instruments engine can be heavy on the CPU when a lot of function and effects are used. Some tips to avoid CPU overload:

- We highly recommend to set the buffer size value of your Soundcard up to 256.
- When possible, use 1 or 2 max. microphone positions, and Purge the unused ones.
- Set “Masking” to “high”.
- When you don’t use a convolution reverb slot, switch it off by choosing “Off”. The Special effects slot needs an important amount of CPU.
- When you don’t use the HP filter, make sure it is at its minimum level.

p r e p a r a t o

GUITAR

Created by Flavio Cangialosi and Filippo Tosti.

Acoustic Guitar: Flavio Cangialosi
Nylon Guitar: Filippo Tosti
Electric Guitar: Davide de Laura

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Special Thanks: All the beta testers (Stefano Ziggiotti, Flavio Cuccurullo, Matteo Cremolini, Andrea Caranfil, Corrado Carano, Flavio Le Fosse). Special thanks to Niccolò Tetti and Pietro Pompei.Impulses

XPERIMENTA

XPERIMENTA Project, 2023