DUE 1.5

A piano library like no others.

<u>User Manual</u>

XPERIMENTA Project

1. Installation

1.1 Unzipping

1) Download the files from the link we sent you via e-mail

2) Place the files in a capient space of the computer (ex: an hard drive)

3) **Unzip the files** with an unzipper like "WinRar" (PC) or Unarchiver (Mac) .
 - PC, WinRar: Select the files, then right click › "Extract inside a folder". Remember to unzip all the files in a unique folder!
 - Mac, Unarchiver: Unzip the files, if they go in different folders, then move all the file of the different folders in just one folder.

1.2 Opening the files in Kontakt

- Open your Kontakt Full Version as plug-in or standalone.

- Drag and Drop or go to File › Load instrument and open the file "1 - Due Big.nki"
The software will load all the samples. This operation can take some times.

To save time in the loading session, we recommend you to save again the .nki patch by overwriting it. To do it click "Files" in the Kontakt menu, then › Save As › Due – First Piano.
Now your library is ready to use!

> If Kontakt says that some samples are missing, try to check the label "Allow alternative file type", and then searching the samples by clicking "Browse for folder". The search folder in this step should be the "XPERIMENTA Due " folder inside. If you still have problems, write us: info@xperimentaproject.com

1.3 Saving the library in the Quick-Load menu

If you want to find the **XPERIMENTA Due library** in a easier and fast way then opening it from the browser, you can add the files in the "QuickLoad" menù.

The Quick-Load menù is a window on Kontakt that allows you to store some of your favourite presets and instruments, so that you can load them "on the road". To add your library on the Quick-Load menu:

- Left-click in a black zone of Kontakt. The software will open a window called "Quick-Load"
- Select the "Instr" button
- To add a new folder, just left-click in the blank area of the quick-load and select "Add new folder"
- Drag and drop the .nki file from the "Due Library" folder to the quick-load blank area or inside
 a quick-load folder. You can do this operation from the explorer (in standalone mode) or from the browser inside Kontakt ("Files")

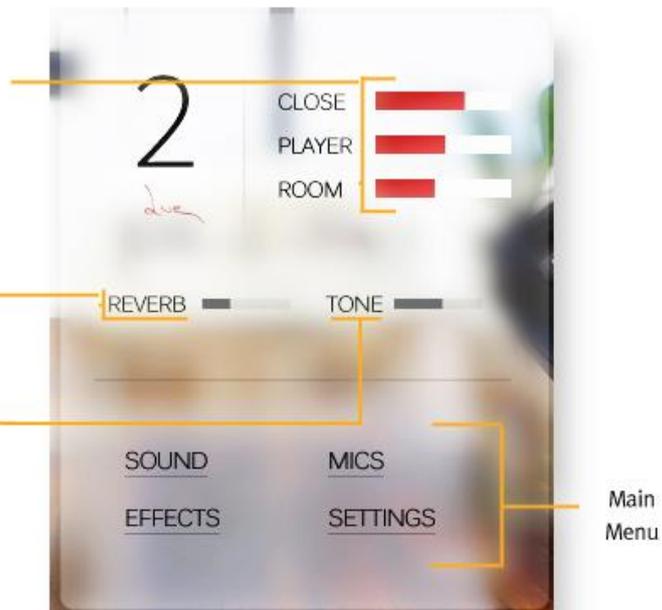More info in the Kontakt User Manual.

2. Pages

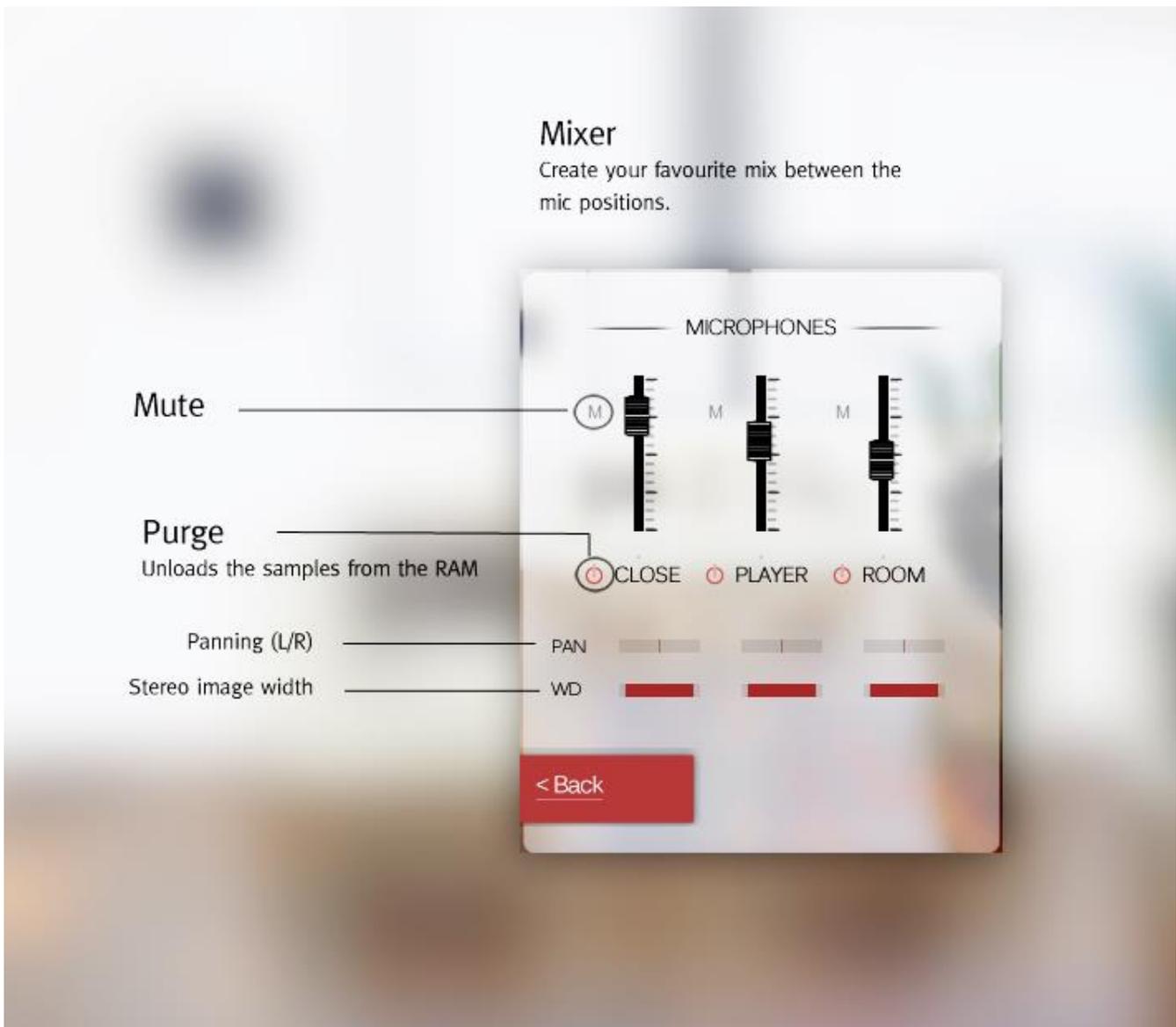### 2.1 Main view controls

Microphone volumes
adjust easily the volume of the microphone source. For a sharp control, use the "Mics" page

Reverb Control
adjust the reverb amount. You can find more settings, like the reverb type, in the Effect > Space page.

Tone Control
adjust the general tone of the instrument. This parameter controls a specific EQ with a customized algorithm.

Main Menu

2.2   Mics page

Mixer
Create your favourite mix between the mic positions.

Mute

Purge
Unloads the samples from the RAM

Panning (L/R)

Stereo image width

MICROPHONES

M   M   M

CLOSE   PLAYER   ROOM

PAN

WD

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Close: a mix with 2 AB microphones + ORTF pair + bass microphone
Player: 2 AB microphones looking the keys
Room: a mix of 4 microphones around in the room

2.3 Sound page

Volume Controls

ADSR Envelope
Affects the Sustain samples

A D S R Curve ⟳ Min ⊘ Max ⊘

Dynamic control
Controls how much the velocity will affect the volume

Dynamics Less ▼ More

Balance
high/low keys   Low ▼ High

Balance
Controls the balance (in volume) between the lower and the higher keys
In the middle it doesn't affect the samples.

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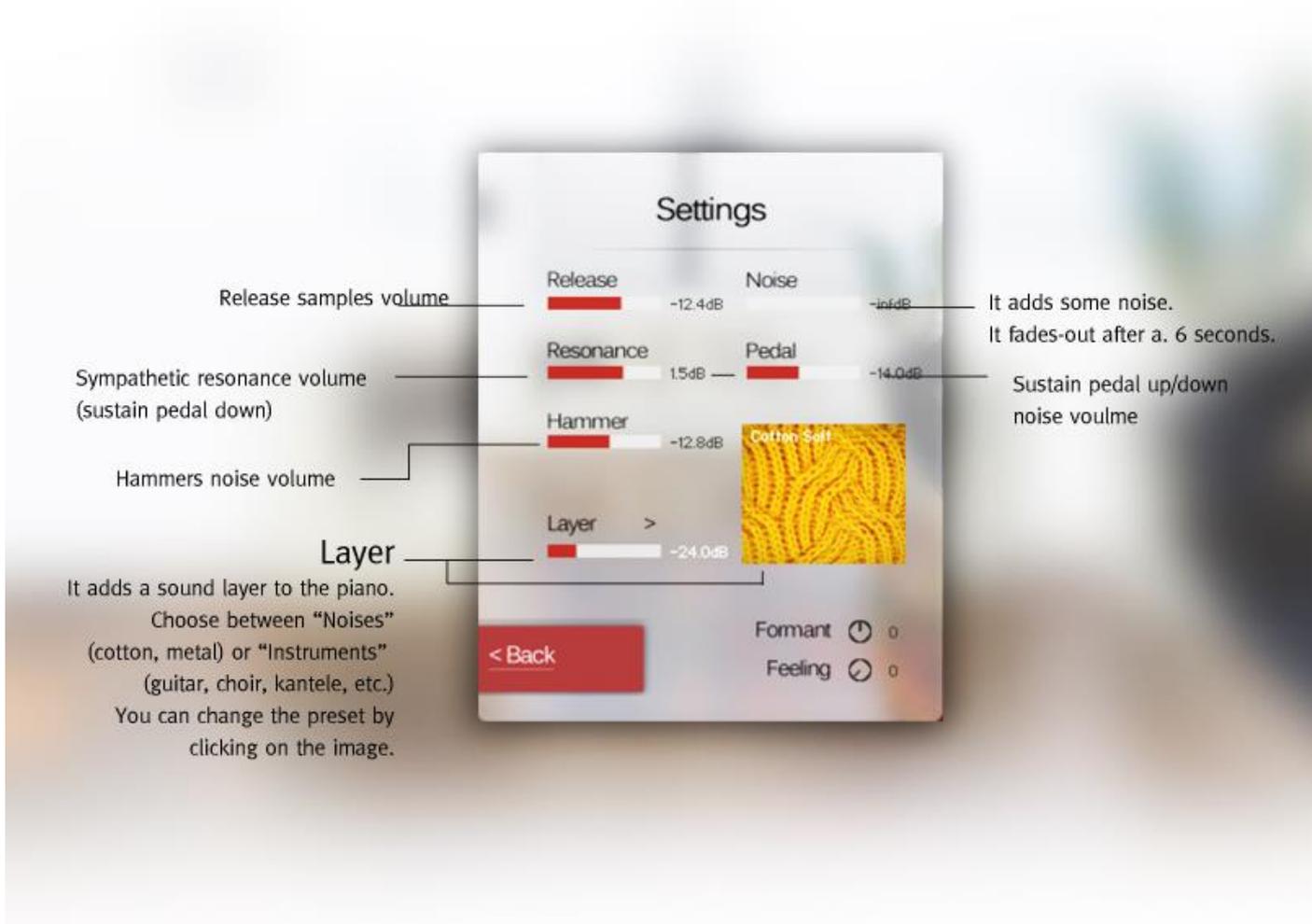
Repedaling ⟳
Overtones ⟲

amount of the effects

Overtones
Switch on/off the harmonic resonance of the keys
! It may consume more CPU.
(see the "Overtones" chapter for further informations)

Repedaling
Switch on/off the repedaling function
(see the "Repedaling" chapter fpr further informations)

What's repedaling and overtones? Go to the "Functions" chapter, below in this little guide.

Settings

Release samples volume — Release -12.4dB

It adds some noise.
It fades-out after a. 6 seconds. — Noise -infdB

Sympathetic resonance volume
(sustain pedal down) — Resonance 1.5dB

Sustain pedal up/down
noise voulme — Pedal -14.0dB

Hammers noise volume — Hammer -12.8dB

Cotton Soft

Layer — Layer > -24.0dB

It adds a sound layer to the piano.
Choose between "Noises"
(cotton, metal) or "Instruments"
(guitar, choir, kantele, etc.)
You can change the preset by
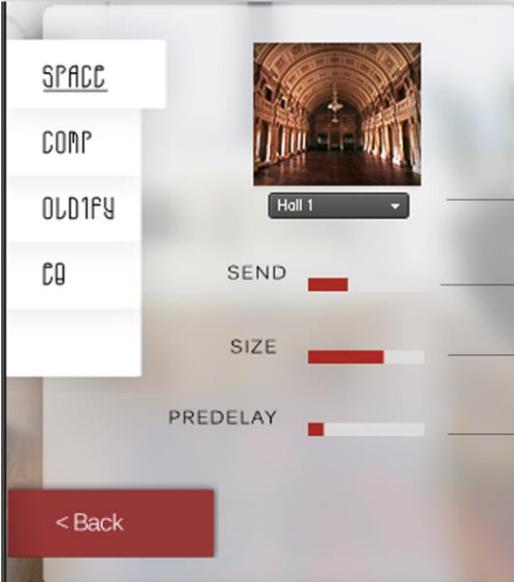clicking on the image.

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Formant 0

Feeling 0

Formant

"Formant" is a feature that changes the speed of the samples. It allows you change the "size" of the piano, and to make a big an warm sound (-12), or a chipmonk, honky-tonky effect (+12).

Feeling (new in 1.5)

"Feeling" is a unique features that allows you to simulate the responce of the weighted keyboard of the piano. When "Feeling" is on (<1), the sound of the piano in the lower velocities will be delayed. You can choose the amount of the delay by increasing/decreasing this parameter. Note that the hammer noise is not affected by this parameter.

2.5 Effects

SPACE

SPACE
COMP
OLD1FY
CQ

Hall 1 ──── Reverb Type

SEND ──── Reverb amount

SIZE ──── Size (lenght of the IR sample). Center is 100%,

PREDELAY ──── Predelay

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COMP

SPACE
COMP
OLD1FY
CQ

COMPRESS ──── Compression amount (treshold)

SOFT — POP ──── Compression type (Ratio + auto attack/release)

on/off switcher
for the compressor and the transient shaper

OUT   MIX ──── Dry/wet mix of the compression (parallel compression)

ATTACK
SUSTAIN ──── Transient shaper

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OLD1FY

SPACE
COMP
OLD1FY
CQ

OLD1FY ──── Oldify switcher for all the effects below

TAPE ──── Tape distortion
FULTTER ──── Flutter effect amount (fast lfo in pitch)
WOW ──── Wow effect amount (slow lfo in pitch)
FILTER ──── Activate and set the bandpassfilter cutoff frequency
PEAK ──── Resonance of the bandpass filter
DETUNE ──── Generates a second voice and controls the pitch of it

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3. Functions

3.1 Sympathetic Resonance

The Sympatetic Resonance is the resonance that we can hear when the sustain pedal is pressed. The played notes will have a "richer" and bigger sound, like a reverb: the note

We sampled the sympathetic resonance of the pianos for each tone and in multiple

What to know?
The resonance will start when the damper pedal is pressed before playing a note or

You can adjust the volume of the s.resonance in the "Settings" page.

3.2 Repedaling

The "repedaling function" wants to simulate a natural resonance effect of every acoustic piano. We can appreciate it when releasing the keys and then fastly pressing the sustain pedal, or when pulling and immediately pushing the damper pedal: the resonance of the previous notes will continue to resonate.

This helps a lot to make the sound much more acoustic and natural. We wanted to add a control to adjust the intensity of this effect, so we added a "Repedaling" control in the Settings page.

The volume of the repedaling depends on an algorythm that we created, and is based on:

- *The velocity of the previous note*
- *How much did it lasts*
- *The position of the key*
- *How long did it take to press the sustain pedal: the time between the last key-off or pedal-off*

This function works if the sustain pedal is pressed after max 320 milliseconds of the release of a key or of the pedal.

It is possible to switch on/off the Repedaling function in the "Sound" page.

3.3 Overtones

The "Overtones" function was built to simulate the harmonic resonance of the overtones in the strings of the piano.

We can appreciate it when pressing softly a cluster of keys in the lower range and then playing staccato notes in the higher register. The software will generate the "overtones", based on wich   key is pressed. This function will give a natural touch to the instrument and a richer sound.

The "Overtones" function generates a harmonic voice based on the interval of the key that is

pressing and the new pressed key. The intervals that generate the overtones are: III, IV, V, XII
You can adjust the volume of the overtones in the "Sound" page, after the bypass led.

P.S. This function may be a bit heavy for the computer when a lot of keys are pressed, if the   CPU overloads we recommend you to bypass the effect or try to increase the latency of your   soundcard.

4.1 Patches overview

In XPERIMENTA Due main folder, you can find 4 patches (.nki files).

– **Due – First Piano:** a Grand Coda C7 sampled Piano with all the features.
– **Due – Second Piano**: a half-coda C3 sampled Piano with all the features.
– **Due – First Piano Light:** is the same patch as the "First Piano", but with less samples (1 each two keys), no IR Convolution Reverb to simulate the body of the piano and no round-robin on release samples. This patch allows you to play at low buffers with a good CPU and Ram usage. Is recommended for live situation, in slower computers or when "Due" is used in a big project and you need to save Ram and CPU resources.
– **Due – Second Piano Light:** The same as the first piano light.
– **Bonus Patches:** special FX made with the samples. Try them! It might be that there're no parameters and GUI.

If you want, you can submit your special patch so we can add it to the "Bouns patches" folder. Write us at info@xperimentaproject.com

5. Credits

Library created by Flavio Cangialosi.
Recorded in Sibelius Academy Studios, Helsinki.

Thanks to all the Sibelius Academy and its Music Technology department, for the incredible opportunities that gives to its students. A special thanks to all the teachers that supervised me in this project: Miikka Huttunen, Luca Proietti, Luigi Zaccheo.

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I want to thanks all the people that helped me in this project and all the beta testers and demo composers: Emil Chieuss, Andreas Juhani, Onni Korhonen, Sachidanand Sankaranarayanan, Ignacio Núñez, Antal Nusselder, Antongiulio Frulio.

Finally, a special thanks to all the XPERIMENTA customers and to my family that was supports me every day and was indispensabile making this project real.