Adam Maor
Les Mille Endormis

Creation Aix en Provence
2019

ircam
Centre
Pompidou

The setup and the execution of the electroacoustic part
of this work requires a Computer Music Designer (Max expert).

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Work related information

Performance details

- None,

Realisation

- Augustin Muller

Useful links on Brahms

- *Les Mille Endormis* **opera for four voices, ensemble and live electronics (2019), 1h10mn**
- **Adam Maor**

Version related information

First performance
Performance date: July 6, 2019
Documentation date: July 22, 2019
Version state: valid, validation date : Dec. 17, 2019, update : May 6, 2021, 3:09 p.m.

Documentalist

Augustin Muller (Augustin.Muller@ircam.fr)

You noticed a mistake in this documentation or you were really happy to use it? Send us feedback!

Realisation

- Augustin Muller (Computer Music Designer)
- Adam Maor (Composer)
- Serge Lacourt (Sound engineer)

Version length: 60 s
Default work length: 1 h 10 mn

Upgrade Motivation

Creation Version. Festival d'Aix en Provence - Théâtre du Jeu de Paume

Comment

United Instruments of Lucilin. Cond. Elena Schwartz.
Keyboard Player : Pascal Meyer
tested and validated by Pascal Meyer

No other version available

Electronic equipment list

Computer Music Equipment

- 1 Retina - *Apple Laptops* (Apple)
  With Live 10.1 & Max 8
- 1 iPad - *Tablets* (Apple)
  with lemur, for monitoring
- 1 Fireface 802 - *Sound Board* (RME)
  6 outputs
- 1 MIDI controller - *MIDI Controllers*
  Korg Nano Kontrol was used
- 1 MIDI Keyboard - *MIDI Keyboard*
  88 keys with pgm change, sustain, expression pedal, modwheel and pitchbend
- 1 MIDI interface - *MIDI Interfaces*
  to connext the keyboard and the controller

Audio Equipment

- 6 Loudspeaker - *Loudspeakers*
  3 layers of stereo.

Files

File	Type	Author(s)	Comment
SL1000 checklist	Readme	A Muller	quick checklist
SL1000_lemur	Other		for ipad
SL1000_SESSION	Ableton session	A Muller	Live 10.1 session with everything

Instructions

Les Mille Endormis - Documentation (2019)

Audio Config

- **6 audio outputs** : 1-2 stereo Pit, 3-4 stereo Front, 5-6 Stereo Backstage

- **0 audio inputs**

System installation

Les Mille Endormis electronic part consist in a Live 10.1 session using Max For Live devices. Max 8 is mandatory (mc.~ usage)

Software

Just open the live session. Enerything is there. Setting was FS: 44100, IO Buffer : 512. (Should be ok @ 48k !)

Midi

- Keyboard:

    - channel 1

    - Modwheel on Ctl 1

    - Expression Pedal on Ctl 7

- Nanokontrol

    - on channel 16

Lemur

For Lemur, just install the provided project. Connexion in usb was used. The ipad is used for **monitoring only**.

Spare

For the spare, a special routing was made in the iconnect, to send both the kehboard and the nanokontrol out of the midi din 1

SL 1000 - ELECTRO SETUP
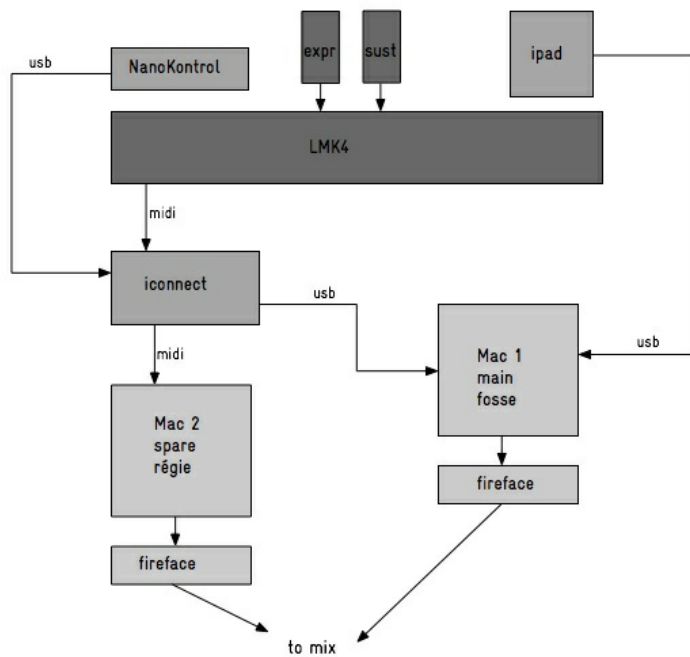
System calibration and tests

Set the levels of the different pair of loudspeaker such as the presence in the pit is comparable to an instrument. The front (face) lvl should be balanced with the pit. For the backstage, try to find a position of speakers that renders an effect of depth but still with correct coverage. In Jeu de Paume, 2 pairs of speakers were used for this layer, one hanged from the top, the other on stands. Beware of the level as this is close to the singers.
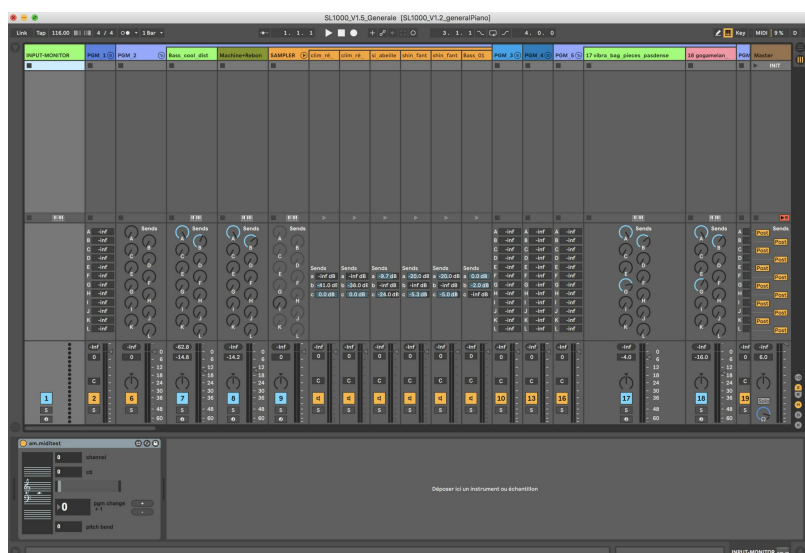
Initialization routine

See quick checklist provided for the total setup. Once everything is connected :

- Check soundcard

- Launch Lemur Daemon and connect (i0/o0, o0/i0)

- Launch the live session

  - check preferences (IO devices & Midi)

  - check every pgm

Session presentation

- The session is organized in the mixer view (no use of the time line)

- The physical midi input goes in the first track (Input-Monitor).

- The physical audio outputs come from the return tracks (no use of the master track)

The volume pedal of the keyboard controls the volume of the first 3 stereo outputs return tracks (A B C, keyboards). The files go in the same physical outputs but without volume control (D E F). G H I are used for effects. J K L are the last outputs for effects and optional direct outs. The order is always the same :

- 1-2 => Pit

- 3-4 => Face

- 5-6 => Backstage

Each group gathers the tracks composing a program. The levels of the tracks can be set by the player to adjust balance between programs.

The NanoKontrol provides access to effects applied to the outputs A B & C (keyboards) :

- filter (freq and reso)

- granulation (chance / freq /drywet)

It enables also some effect sends added to the outputs :

- reverb

- pitched delay

- freqshift (drywet)

Midi Interface

- Keyboard:

    - channel 1

    - Modwheel on Ctl 1

    - Expression Pedal on Ctl 7

- Nanokontrol

    - on channel 16

In Live prefs, the keyboard, Nano Kontrol & Lemur must be enabled in "track" and "remote". See checlist for an screenshit of the midi prefs.

Performance notes

General : Les Mille Endormis features 3 main strategies for electronics :

- Keyboard Sounds

    - Mostly play in the pit

    - quasi-instrumental sounds

    - mixed with the instruments

- Textures (shin_fant, synth …)

    - more diffuse in the space

- synthetic sounds

- modified with the nanokontrol (gran, filter …)

- Soundfiles

  - more in the backstage

  - triggered with no live control on the volume or color

The levels of soundfiles have to be set in the test phase then are not modified during the performance.

See the score for details.

The Opera is <u>lightly</u> amplified. All singers and instruments are equipped with microphones.

As acoustic balance is achievable, light amplification of the instruments is necessary for effect and blending, and the voice of the bass singer must be at some times (sc 8 …) reinforced in the backstage speakers to give a low, cavernous voice impression.

Here a view of th pit. Notive the placement of the Right speakers at the height of the keyboardist. The other one is on the floor next to the accordeon.