

Luca Francesconi

*Animus II*

2007

ANIMUS\_II\_Max8\_48kHz  
2020



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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

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### Performance details

- June 14, 2007, Paris, Ircam, Festival Agora

Publisher : Ricordi

### Detailed staff

- viola

### Realisation

- Benoît Meudic

### Useful links on Brahms

- [Animus II for viola and electronics \(2007\), 15mn](#)
- [Luca Francesconi](#)

## Version related information

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Documentation date: March 24, 2020

Version state: valid, validation date : March 28, 2020, update : May 6, 2021, 3:09 p.m.

### Documentalist

Benoit Meudic (Benoit.Meudic@ircam.fr)

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

### Realisation

- Benoit Meudic (Computer Music Designer)
- Garth Knox (Performer)

Version length: 20 mn

Default work length: 15 mn

### Upgrade Motivation

Max8 upgrade, 64 bits, 48kHz, click-track and sound files played by max.

### Other version(s)

- [Luca Francesconi - Animus II - ANIMUS\\_II\\_VCL-Musica-2018 \(Nov. 19, 2018\)](#)
- [Luca Francesconi - Animus II - AnimusIImax6-2015 \(Sept. 30, 2015\)](#)
- [Luca Francesconi - Animus II - AnimusIImax6 \(Dec. 1, 2013\)](#)
- [Luca Francesconi - Animus II - concert 2010-04-22 \(May 5, 2010\)](#)
- [Luca Francesconi - Animus II - transfert\\_mustica\\_ftp \(April 14, 2010\)](#)
- [Luca Francesconi - Animus II - Animus II \(June 1, 2007\)](#)

## Electronic equipment list

### Computer Music Equipment

- 1 MacBook Pro - *Apple Laptops* (Apple)  
main computer
- 1 MacBook Pro - *Apple Laptops* (Apple)  
option2: laptop display of click-track connected by ethernet to the main computer
- 1 iPad - *Tablets* (Apple)  
iPad for score display with bluetooth pedal for page turn
- 1 iPad - *Tablets* (Apple)  
option1: ipad for click-track display with Mira installed
- 1 network - *Network/Communication*  
option1: wifi hotspot connected by ethernet to the main computer
- 1 RJ 45 Cable - *Cable*  
for ethernet connexion between stage and sound booth
- 1 Cable - *Cable*  
option2: vga for screen
- 1 Fireface 800 - *Sound Board* (RME)  
at least 1 audio in 6 audio outputs

### Audio Equipment

- 1 DPA 4021 - *Condenser Microphones* (DPA)  
for viola
- 6 Loudspeaker - *Loudspeakers*
- 1 DM1000 - *Digital Mixers* (Yamaha)
- 1 Digital Mixing Desk - *Digital Mixers*
- 1 Lexicon 300 - *Effects Processor* (Lexicon)  
for amplification

### Video

- 1 Screen - *Screen*  
for instrumentist

**Files**

<b>File</b>	<b>Type</b>	<b>Author(s)</b>	<b>Comment</b>
<a href="#">Animus2option1</a>	Document		
<a href="#">Animus2option2</a>	Document		
<a href="#">AnimusII-alto-edited</a>	Score		
<a href="#">AnimusII-alto-original</a>	Score		
<a href="#">AnimusII-cello</a>	Score		
<a href="#">AnimusII2020.dmg</a>	Patch		complete package (including the max8 patch)
<a href="#">rec-munich-alto.aif.zip</a>	Simulation files	Garth Knox	recording of the Munich concert
<a href="#">for-practice</a>	Video		video with the visual metronome and sound track to practice the piece

## Instructions

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### Description of the piece:

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“AnimusII” is a piece composed by Luca Francesconi for viola and live electronics.

It was created in ‘Espace de projection’ - IRCAM on June 2007 (Garth Knox - Alto, Benoit Meudic - computer music design).

### Elements required to play the piece:

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- 1 main computer for electronic treatments with at least max 8.1.1 (Mac os  $\geq$  12.12.8 & MacBookPro  $\geq$  2.7Ghz),
- 1 in/ 6 outs audio interface (for instance RME fireface 400)
- 1 microphone for the viola
- 1 mixing console
- 6 points full band diffusion system.
- 1 reverb for amplification (for instance Lexicon)
- 1 usb MIDI mixer (for instance Behringer BCF 2000).
- 1 iPad for displaying the score with a bluetooth pedal for page turn

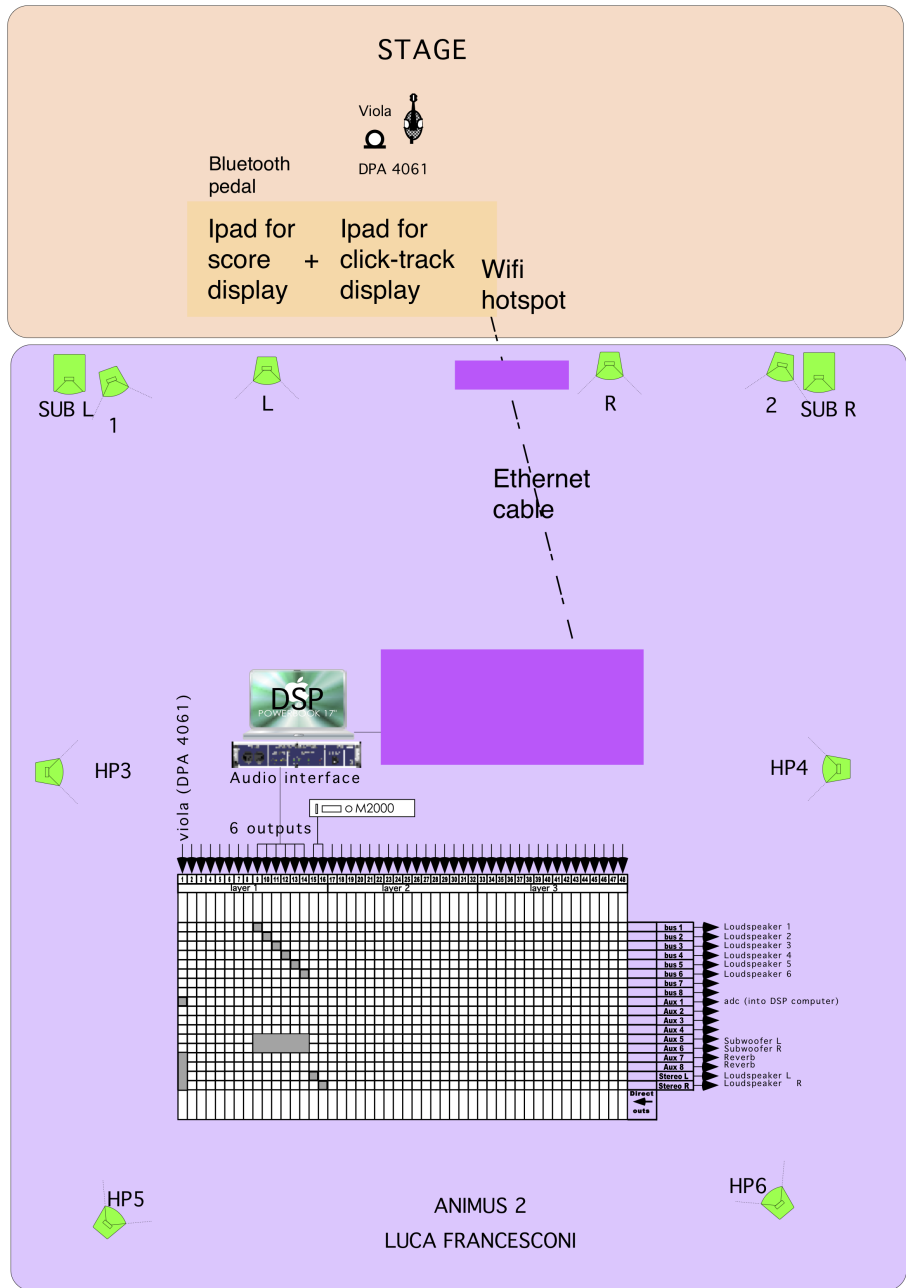
Additionally, you need to choose among the following options for displaying the click-track to the instrumentist:

#### **Option1:**

Use of another iPad with Mira installed. The iPad will receive the click-track via wifi. It can be positioned next to the iPad displaying the score.

You will need also need 1 wifi hotspot on stage connected by ethernet to your main computer for wifi connection to the iPad from stage.

See implementation doc ‘Animus2option1.pdf’



**Option2:**

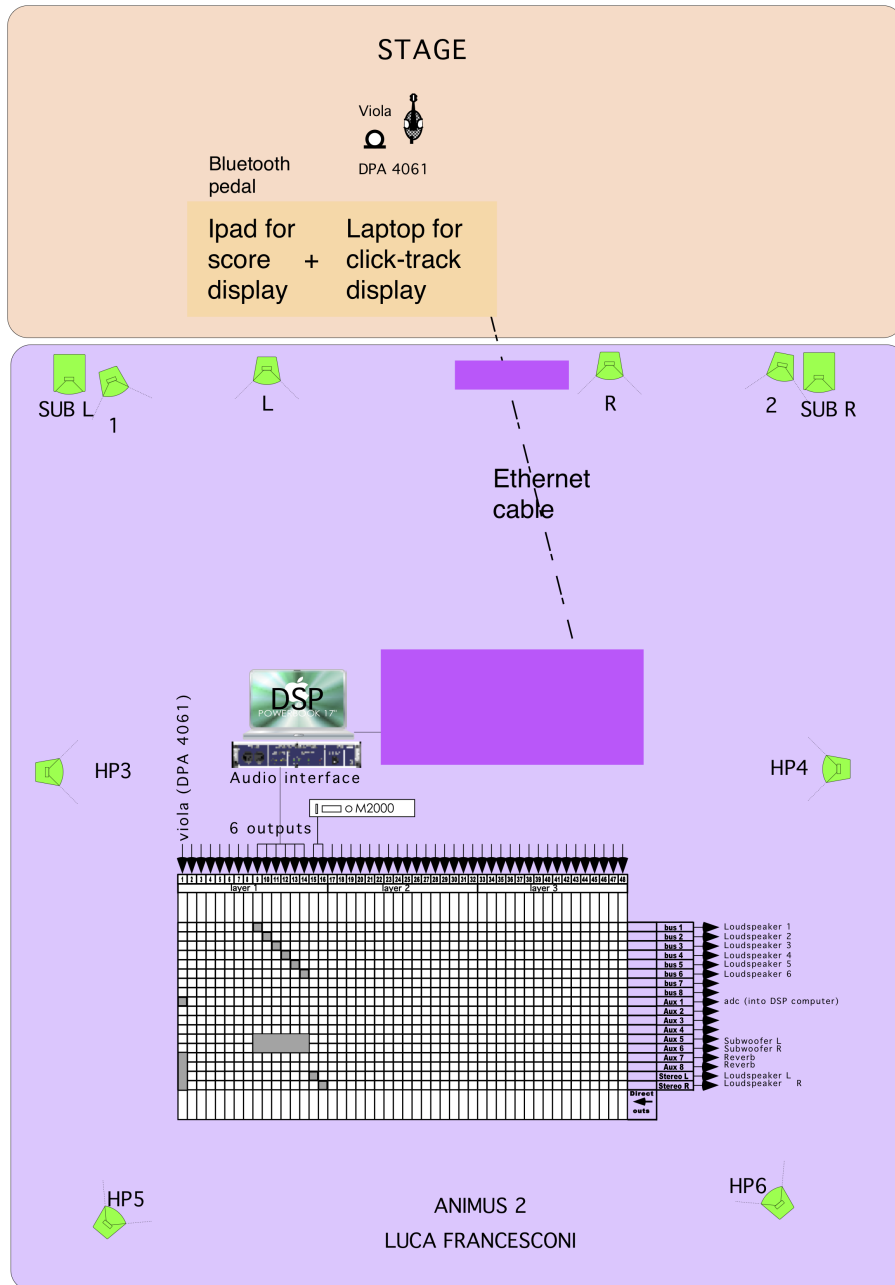
Use of another laptop computer on stage

The laptop computer should be connected by ethernet to the main computer.

Eventually you can connect to the laptop a 24 inches screen (for instance Apple Cinema HD Display)

See implementation doc ‘Animus2option2.pdf’





## General informations:

The electronic part of Animus II is based upon soundfiles with a click-track all along the piece and real-time treatments on the viola sound.

The soundfiles are played by 4 players, two 6-channels players (sfile6A and sfile6B), and two stereo (sfileC and sfileC2 which is panned on 4 outputs).

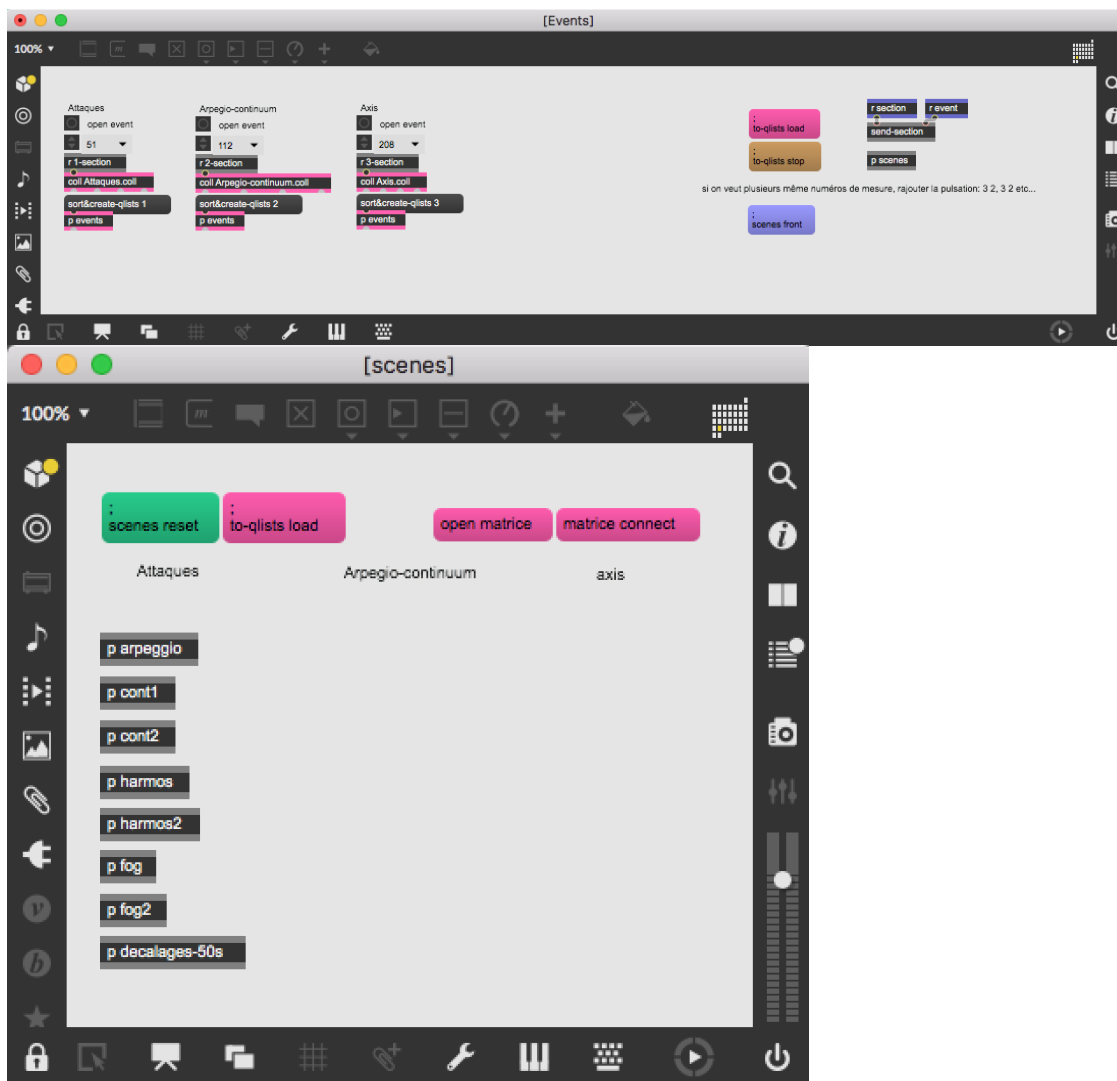
Real-time treatments are realized with sampler, granulator, harmonizer and spatialisation modules.

The instrumentist follows a visual click-track in order to synchronise itself with the electronic part. The click-track is displayed with an ipad (option1) or with a laptop (option2).

The score is displayed with an ipad so that the instrumentist can easilly turn the page with a bluetooth pedal.

A control surface (midi mixer) should be used in order to mix the electronic treatments and the soundfiles (see faders mapping below).

The events trigger different states of different scenes. A scene is complex treatment, for instance arpeggio, cont1, cont2 etc...



## SCORE DISPLAY:

Use your iPad or a provided iPad for displaying the score with a bluetooth pedal for page turn.

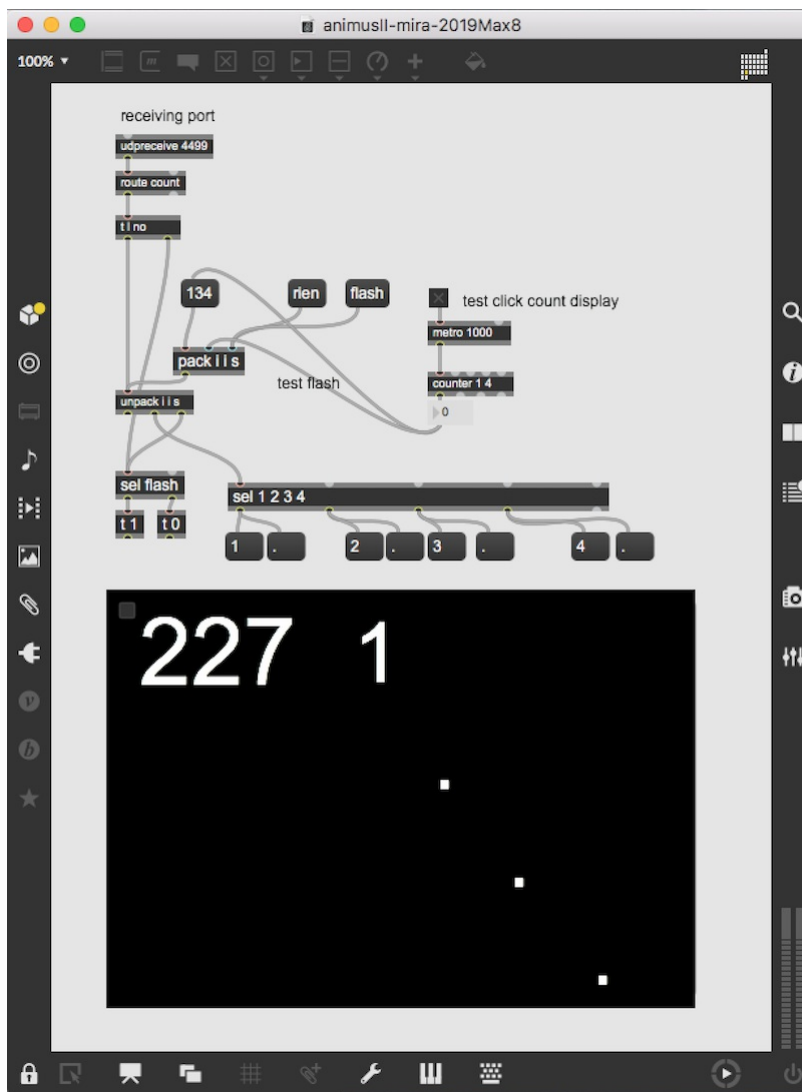
## CLICK-TRACK DISPLAY:

### Option1

Connect the ipad to the wifi hotspot.

Open the patch 'animusII-mira-2019Max8' in max. Open Mira on your ipad and connect to your computer in the top-right of the window.

The click display should appear on the ipad.



## Option2

Open 'animusII-laptop-800x600-2019Max8' on the stage laptop.

Choose a manual ip adress and connect the laptop to the main computer with an ethernet cable.

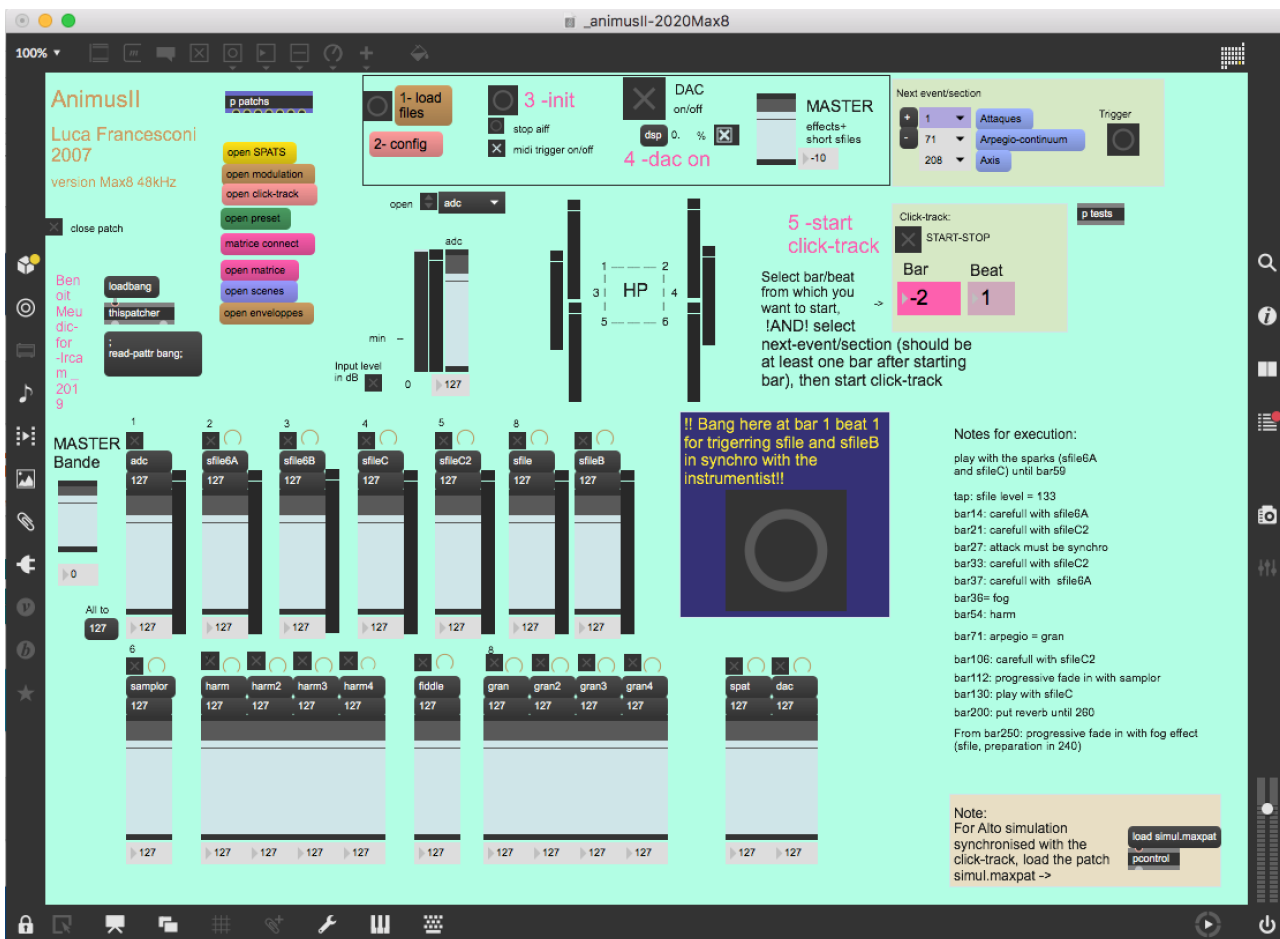
## MAIN COMPUTER:

### installation:

Copy the folder 'animusII-max' on the hard disk of the main computer.

Launch max, and select this folder (and only this one) in the 'file preferences' menu of max.

Open the file '\_animusII-2020Max8' in Max.



### Description (figure 'main-patch'):

The concert patch is composed of:

- Top right: interface for events triggering and click-track playing. Events are represented by a number corresponding to the bar number reported in the instrumental score. The highlighted number corresponds to the next event that will be triggered. During rehearsal, you can play click-track from any bar (only on the first beat): select the bar in the click-track panel, then start click-track).
- Top middle: main sub-patchers (audio, midi, libraries, events counter, reset, matrix connections).
- Bottom: live mixing faders.
- Bottom right: simulation file opening

### Inputs/Outputs:

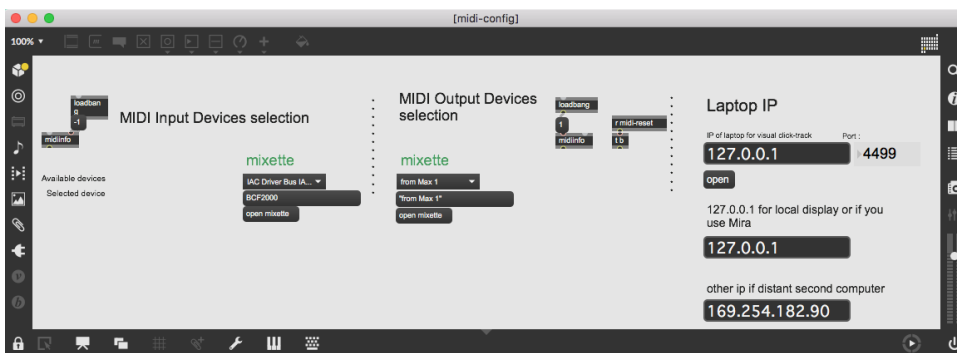
There is 1 input for the alto.

There are 6 outputs: 6 for live electronics and soundfiles (dac 1..6 on loudspeakers 1 front left, 2 front right, 3 middle left, 4 middle right, 5 back left and 6 back right). The position of the loudspeakers is detailed in figures 'Animus2option1' or 'Animus2option2'.

### Initialisation in max:

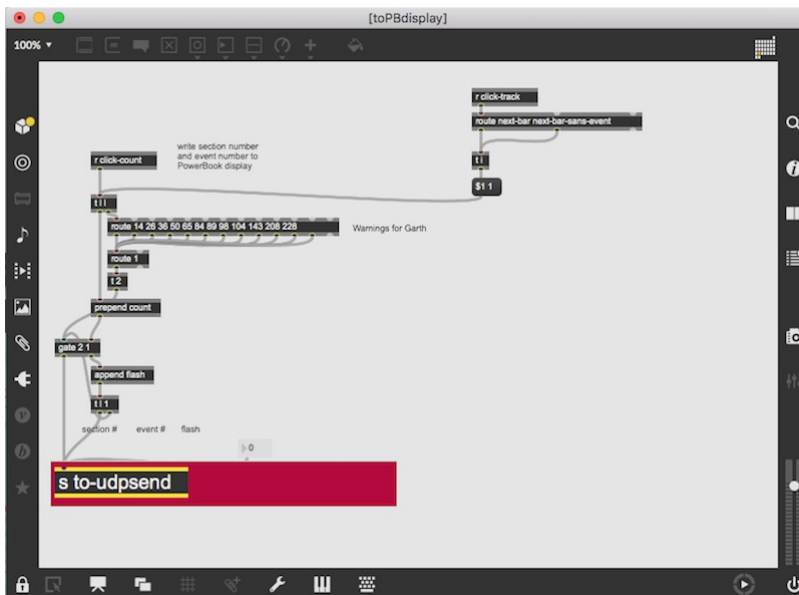
To initialize the patch:

1. Click on '1-load files'
2. Click on '2-config' (figure 'midi-config') and select your midi input/output of 'mixette' in order to config your MIDI setup for the control surface (for mixing of adc, sfiles, sampler, harm and gran). You can access to the routing of midi channels by clicking on 'mixette' (picture 'midi-mixing-control').



Choose a manual ip address in the network preferences of your mac and provide the ip address of the laptop displaying the click-track (option2) or enter 127.0.0.1 if you use Mira (option1).

If wanted by the instrumentist, you can send flash signals with the click-track in order the instrumentist to pay attention to specific bars. This can be done in patch 'toBDdisplay', just add or remove the bar numbers in the 'route' object:

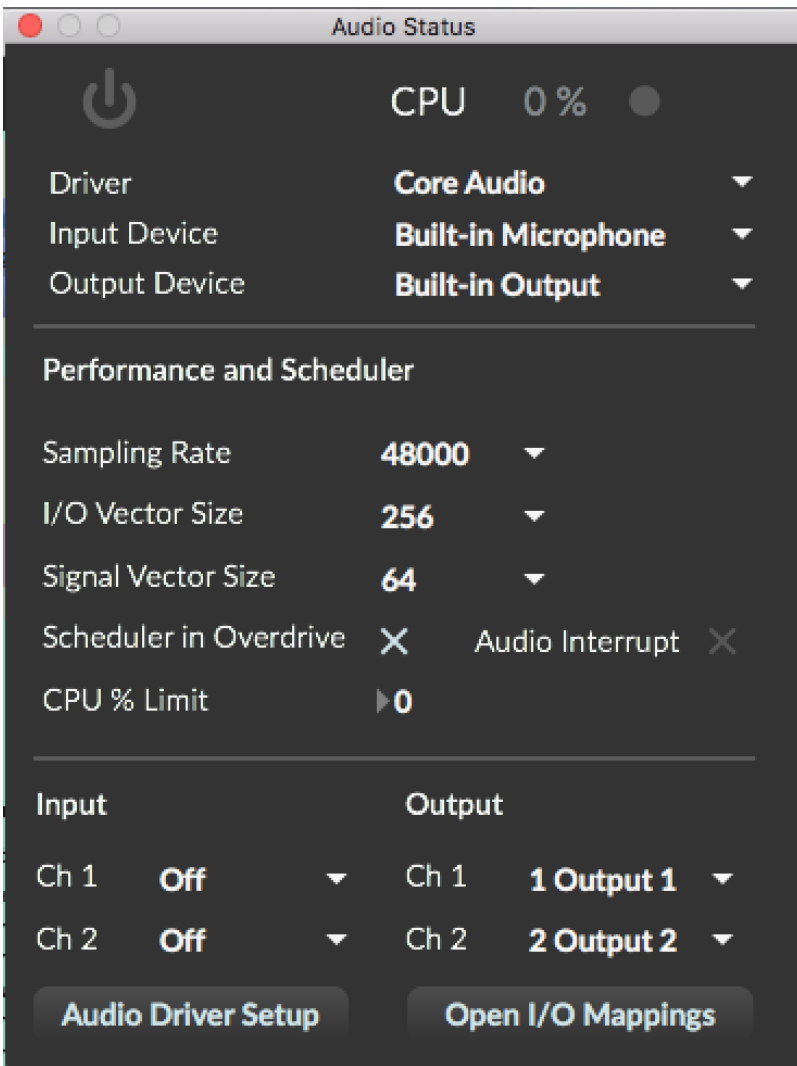


Save the main patch.

The configurations will be saved even if you quit max.

3. click on '3-init' and wait for the message 'ok bang' in the max message window.

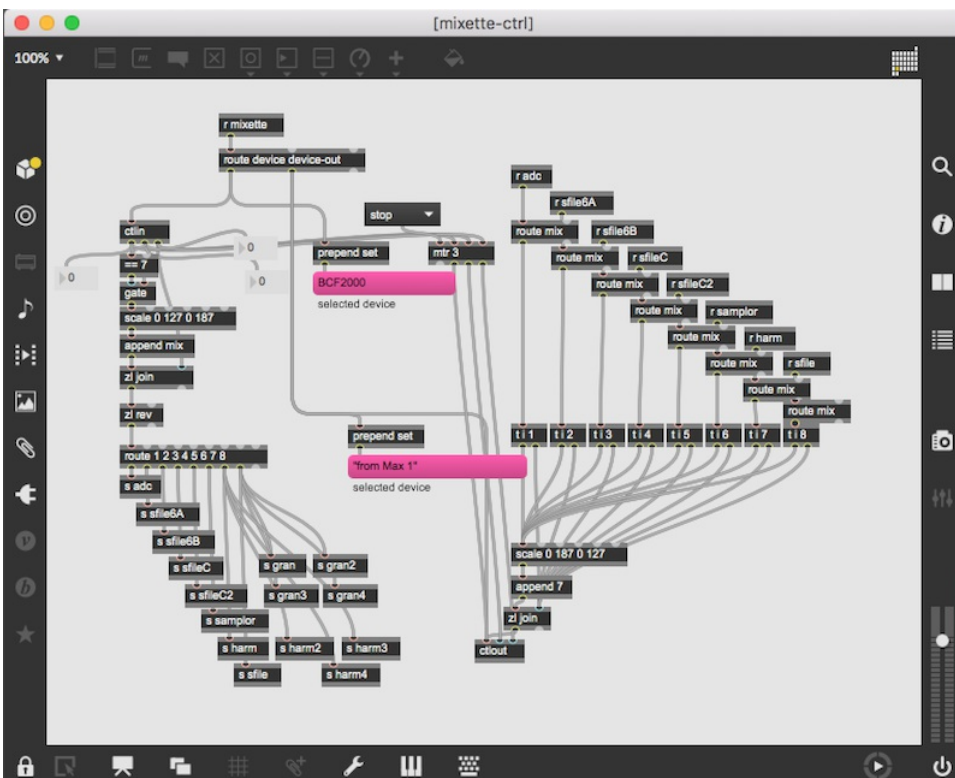
The audio status should automatically be set to 256 for I/O Vector Size, 64 for Signal Vector Size, 48000 for sampling rate, overdrive on and audio interrupt off :



The bar/beat position on the displaying computer/ipad should automatically be set to '-2 1'. If not, check the udp connection between the two computers or check that Mira is connected to the main computer.

4. turn the DSP on

**Midi faders mapping:**



Midi controller #7 is used for the control faders :

- channel 1, adc level
- channel 2, sfile6A
- channel 3, sfile6B
- channel 4, sfile6C
- channel 5, sfile6C2
- channel 6, samplor
- channel 7, harmonizers
- channel 8, sfile/granulators.

### **To run the patch:**

Initialise the MAX patch, turn the dac on.

Start the click-track in max. The click-track starts 2 bars before bar 1.

On bar 1 beat 1, you have to manually trigger a soundfile (there is a bang button in the main patch for that). The important thing is to be synchronous with the instrumentist, not with the click-track.

During the execution of the piece, follow the soundfiles and the electronic treatments (harmonizer, samplor, granulator). The electronic should be at least as loud as the instrumentist.

Some notes:

beginning: play with the sparks (sfile6A and sfileC) until bar59

tap: sfile level = 133

bar14: carefull with sfile6A

bar21: carefull with sfileC2

bar27: attack must be synchro

bar33: carefull with sfileC2

bar37: carefull with sfile6A

bar36: fog

bar54: harm

bar71: arpeggio = gran

bar106: carefull with sfileC2

bar112: progressive fade in with samplor

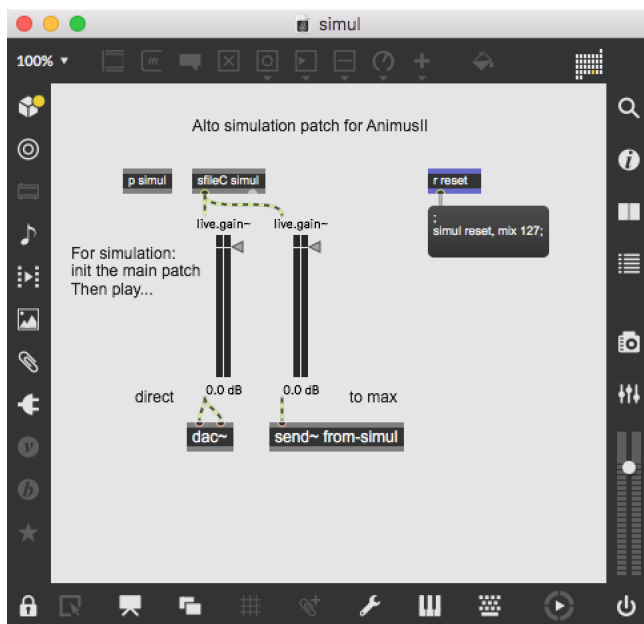
bar130: play with sfileC

bar200: put reverb until 260

From bar250: progressive fade in with fog effect (sfile, preparation in 240)


### **Simulation patch**

In the bottom right part of the main patch, you can open a simulation patch. It uses a recording from Garth Knox for a concert in Munich. Initialize the main patch after opening, then play the click-track normally.



## Practice file

For practicing, the instrumentist can use the file AnimusII-click.mp4 in the folder 'for-practice'. This file is a video that displays the click-track, and plays the soundfiles.

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## Program note

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*Animus II* est le deuxième chapitre d'une série d'explorations sonores par des techniques digitales. Dans chaque pièce, un soliste se confronte à l'ordinateur : dans *Animus I*, c'était le trombone et ici l'alto – *Animus I* paraîtra sur un CD monographique de Luca Francesconi dans la collection « Sirène » de l'Ircam et de l'Ensemble intercontemporain édité chez Kairos (sortie prévue en novembre 2007). Ces deux pièces sont des commandes de l'Ircam.

C'est une nouvelle recherche de particules de lumière dans une matière usée, saturée, post-digitale.

Avec l'ordinateur, on explore d'abord ces lueurs puis les connexions musicales et vitales entre rythmes et couleurs. Mais cette *tekmè* n'est peut-être plus une alliée et démolit les limites de notre intimité, nous envahissant.

La pièce est née d'un projet avec Garth Knox il y a quinze ans : alors que nous écoutons le solo d'alto du *Quatuor n° 3* que nous étions en train d'enregistrer à la Radio de Cologne, nous avons pensé qu'il serait intéressant de développer ce fragment en œuvre à part entière, presque un « concerto » pour alto et électronique. Le rôle de cet élément sert de moteur générateur de fonctions compositionnelles et articulatrices mais aussi de fonctions expressives, et investit toute la pièce d'une dimension rituelle, d'une « tension sémantique ».

Luca Francesconi, Agora 2007

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