

Matthias Pintscher  
*Verzeichnete Spur*  
2006  
max8-2018  
2019



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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

- March 9, 2006, Bruxelles, festival Ars Musica

Publisher : Bärenreiter

### Detailed staff

- soloists: 1 double bass, 3 cellos
- 1 bass clarinet, 1 contrabass clarinet, 3 percussionists, 1 harp, 1 piano

### Realisation

- Benoît Meudic

### Useful links on Brahms

- [Verzeichnete Spur](#) for double bass, three cellos, ensemble and real-time electronics (2005), 20mn
- [Matthias Pintscher](#)

## Version related information

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Performance date: Jan. 20, 2018

Documentation date: Feb. 6, 2019

Version state: valid, validation date : May 16, 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

Version length: 20 mn

Default work length: 20 mn

### Upgrade Motivation

Version max 8

Spatialisation added and revision with Matthias Pintscher

### Other version(s)

- [Matthias Pintscher - Verzeichnete Spur - agora-cite-de-la-musique \(June 29, 2010\)](#)

## Electronic equipment list

### Computer Music Equipment

- 1 MacBook Pro - *Apple Laptops* (Apple)  
MacBook Pro  $\geq 2.7\text{Ghz}$  with os  $\geq 10.12.16$
- 1 iPad - *Tablets* (Apple)  
iPad for mixing
- 1 Max 8 - *Max* (Cycling74)
- 1 antescofo~ - *External objects* (Ircam)
- 1 Mira - *Library* (Cycling74)
- 1 Sound Board - *Sound Board*
- 1 Footswitch / Sustain Pedal - *Footswitch / Sustain Pedal*

### Audio Equipment

- 1 Microphone - *Microphone*  
for all instruments
- 6 Loudspeaker - *Loudspeakers*
- 1 Lexicon 300 - *Effects Processor* (Lexicon)  
for amplification

Files

File	Type	Author(s)	Comment
<a href="#">Verzeichnete Spur 2018-simulation Project.dmg</a>	Simulation files		ableton live session for simulation
<a href="#">Verzeichnete Spur 2018.dmg</a>	Patch		max patch
<a href="#">Verzeichnete_Spur</a>	Score		only for computer music designer

# Instructions

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## Description of the piece

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*Verzeichnete Spur* is a piece composed by Matthias Pintscher for double bass, three cellos and live electronics.

It was created in 2005

## 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 >= 12.12.8 & MacBookPro >= 2.7Ghz),
- 4 in/ 6 outs audio interface (for instance RME fireface 800)
- microphones for each instrument
- 1 mixing console
- 6 points full band diffusion system.
- 1 midi sustain pedal for triggering events (double bass player)
- 1 iPad for mixing with *mira*

## General informations:

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The electronic part of *Verzeichnete Spur* is based upon real-time treatments on the instruments: chromax, delays, filters, harmonizers, lana, granular synthesis, resonators and spatialisation.

An ipad should be used for mixing the electronic treatments and the soundfiles (see faders mapping below).

The events are triggered by the double bass player (sustain pedal with midi connection to the patch).

The event are written in Antescofo language for recalling presets of the effects (file data/scores/VerzeichneteSpur.asco).

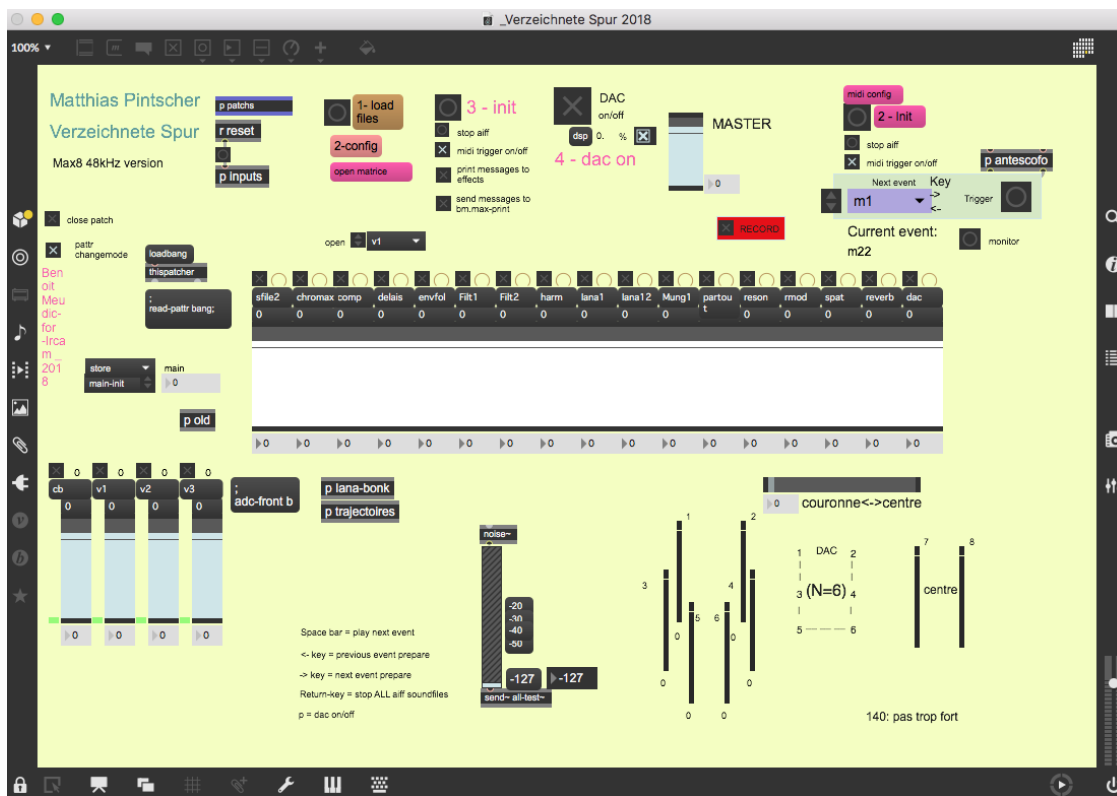
## MAIN COMPUTER

### installation

Copy the folder ‘Verzeichnete Spur 2018’ 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 ‘\_Verzeichnete Spur 2018’ in Max.



### Description (figure ‘main-patch’)

The concert patch is composed of:

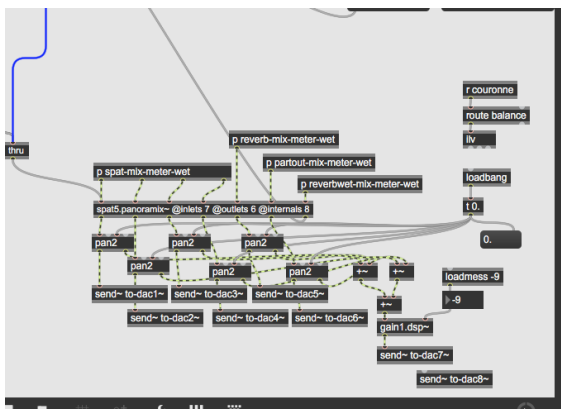
- Top right: interface for events triggering. Events are represented by a number corresponding to the bar number reported in the instrumental score. The highlighted number corresponds to the next event that will be triggered.
- Top middle: main sub-patchers (audio, midi, libraries, events counter, reset, matrix connections).
- Bottom: live mixing faders.

### Inputs/Outputs

There are 4 inputs for double bass (cb), cello1 (vc1), cello2 (vc2), cello3 (vc3).

There are 6 outputs: dac 1..6 for loudspeakers 1 front left, 2 front right, 3 middle left, 4 middle right, 5 back left and 6 back right

Optionnally you can also use outputs 7-8 in case of specific venue configuration with a center point (for instance if the audience is around the musicians as it is the case in the ‘boulez concert hall’ in Berlin. In order to use them you should connect the receive message ‘couronne balance’ in the patch ‘p spat’ to the third input of the object ‘pan2’. Then the messages ‘couronne balance’ in the score ‘VerzeichneteSpur.asco.txt’ can be tuned according to what you want.



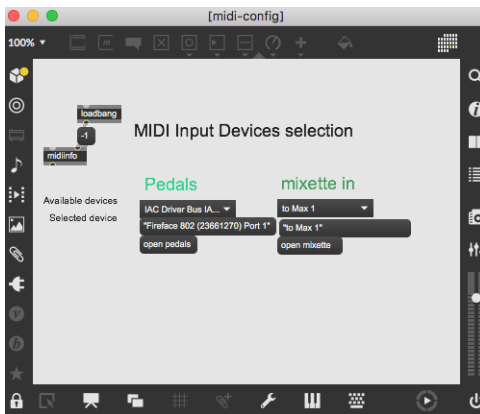
### Initialisation in max

To initialize the patch:

1. Click on ‘1-load files’

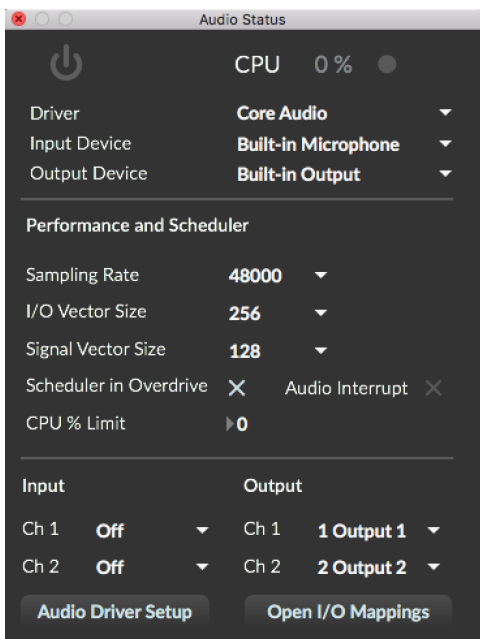


2. Click on '2-config' to choose the midi port for the sustain pedal



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, 128 for Signal Vector Size, 48000 for sampling rate, overdrive on and audio interrupt off :

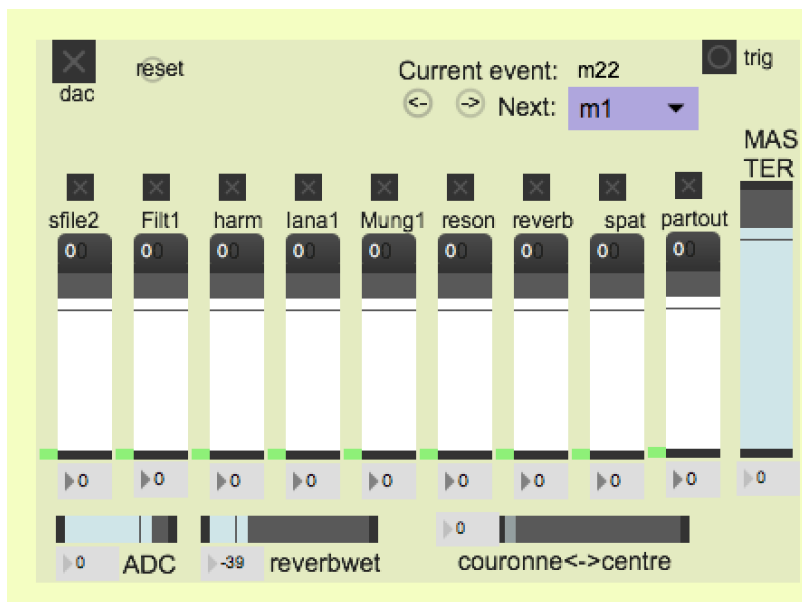


4. turn the DSP on

Keyboard shortcuts: 'space bar' for triggering events, '<-' for going one event back, '->' for going one event after, 'return key' for stopping sfiles.

## Ipad mixing control:

You can control the patch with an ipad via Mira: control of live mixing faders of sfiles, filter, harmonizer, Iana1, Munger, resonator, reverb, spatialisation and master fader.




## Execution instructions

There should always be quite a lot of reverb on the instruments. The inputs mics sent to the patch should be compressed. Try to reduce also the frequencies that could “feed” feedback (depending on the concert hall).

Input levels of main treatments should be followed during the concert. We should hear each resonnators, but without feedback. Try to make electronic sound natural, as if it was coming from the instruments. 140: not too loud.

## Simulation:

You can use the live session ‘Verzeichnete Spur 2018-simulation Project’ for simulating the input of the instruments. The tracks “\*-elec” are only for display, the envelopes ‘param’ show the opening of electronic treatments and do not contain sounds.

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## Program note

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Dans *L'Espace dernier*, j'ai développé un concept dramaturgique où je thématise la perspective acoustique. Il s'agissait pour moi d'exposer un vocabulaire sonore (un matériau) et sa résolution continue ou sa transformation en un autre état, plus « ouvert ». Les impulsions et les signes résiduels restaient sans réponse dans ce « dernier espace acoustique »... Dans cette nouvelle pièce créée pour le Klangforum Wien, j'ai souhaité prendre un point de départ similaire et continuer à travailler aux perspectives que j'ai développées, en me concentrant cette fois sur une formation et une dimension particulières. J'ai placé l'autonomie de la ligne évocatrice au centre de mes réflexions. Cette ligne décrit la gestuelle de la marche (qui est elle-même le thème de mon dernier opéra). L'espace dans lequel se meuvent ces signes et ces formes en marche se trouve dans un non-espace. La présence d'un signe ne doit valoir que dans l'instant où il communique avec nous – il est décrit, évoqué et dissous à nouveau, comme s'il suivait sa propre trace esquissée (*Verzeichnete Spur*).

Roland Barthes : « *Le signe est une fracture qui ne s'ouvre jamais que sur le visage d'un autre signe.* »

Matthias Pintscher.

Version documentation creation date: Feb. 6, 2019, 11:43 a.m., update date: May 6, 2021, 3:09 p.m.