

Michael Jarrell  
*Cassandre*  
1994  
Genève - 2015  
2015



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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

- Feb. 4, 1994, Paris, Théâtre du Châtelet

Publisher : Lemoine

### Detailed staff

- soloist: actress
- flute, oboe, clarinet, bass clarinet, bassoon, 2 horns, trumpet, trombone, 2 percussionists, piano, electronic/MIDI keyboard/synthesizer, violin, second violin, viola, cello, double bass

### Realisation

- Pierre Charvet

### Useful links on Brahms

- [Cassandre](#) monodrama for actress, instrumental ensemble and electronics (1993-1994), 1h5mn
- [Michael Jarrell](#)

## Version related information

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Performance date: Sept. 21, 2015

Documentation date: Oct. 28, 2015

Version state: valid, validation date : March 25, 2020, update : Feb. 2, 2022, 12:31 p.m.

## Documentalist

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

## Realisation

- David Poissonnier (Sound engineer)

Version length: 1 h 5 mn

Default work length: 1 h 5 mn

## Upgrade Motivation

Port of the Z8 sampler to a sampler~ based patch in max.

Tested in performance with the composer.

Max 6 version of the main patch.

Some new sounds in the main patch.

## Comment

This version was played for the Comedie de Genève production of Cassandra with Fanny Ardant (21-27.09.2015)

## Other version(s)

- [Michael Jarrell - Cassandra - Max8 \(Feb. 2, 2022\)](#)
- [Michael Jarrell - Cassandra - Sampler version - no akai \(March 23, 2015\)](#)
- [Michael Jarrell - Cassandra - Lugano2012 \(Feb. 21, 2013\)](#)
- [Michael Jarrell - Cassandra - cassandre-aout-2010 \(Sept. 8, 2010\)](#)
- [Michael Jarrell - Cassandra - cassandre-patch-sampler-externe-2010 \(Aug. 3, 2010\)](#)
- [Michael Jarrell - Cassandra - 2006 Mac OSX \(March 7, 2006\)](#)

## Electronic equipment list

### Computer Music Equipment

- 1 MacBook Pro - *Apple Laptops* (Apple)
- 1 Max 6 - *Max* (Cycling74)  
or MAX7 in 32bit mode
- 1 Sound Board - *Sound Board*  
Number of analog output:2 , Sampling Rate : 44100
- 1 KX 76 - *MIDI Keyboard* (Yamaha)  
was connected directly to the Akai sampler, now controls the Cassandre\_Sampler max patch. Range used : from F#0 (MIDI pitch 30) to G5 (MIDI pitch 91) [Heavy touch:1] [Key number:76]
- 1 KX 88 - *MIDI Keyboard* (Yamaha)  
to be connected to the Macintosh computer to trigger sound files, via the MIDI interface. Used from C0 (MIDI pitch 24) to G#6 (MIDI pitch 104) [Heavy touch:1] [Key number:88]
- 1 Midi interface - *MIDI Interfaces*  
to interface the 88 key MIDI keyboard to the Macintosh Computer [Port type:USB] [I/O number:1 input]

### Audio Equipment

- 2 Dynamic microphone - *Dynamic Microphones*  
Wireless microphone for the voice (actress)
- 18 Dynamic microphone - *Dynamic Microphones*  
for the orchestra
- 1 HF System - *HF System*
- 2 Amplifier - *Amplification*
- 2 Loudspeaker - *Loudspeakers*
- 1 Mixing Console - *Mixing Console*
- 1 Effect processor - *Effects Processor*  
Equalizer for the voice (actress)
- 1 Effect processor - *Effects Processor*  
Compressor/limiter for the voice (actress)
- 2 Effect processor - *Effects Processor*  
Reverberations : one for the voice (actress), the other for the instrumental ensemble

Files

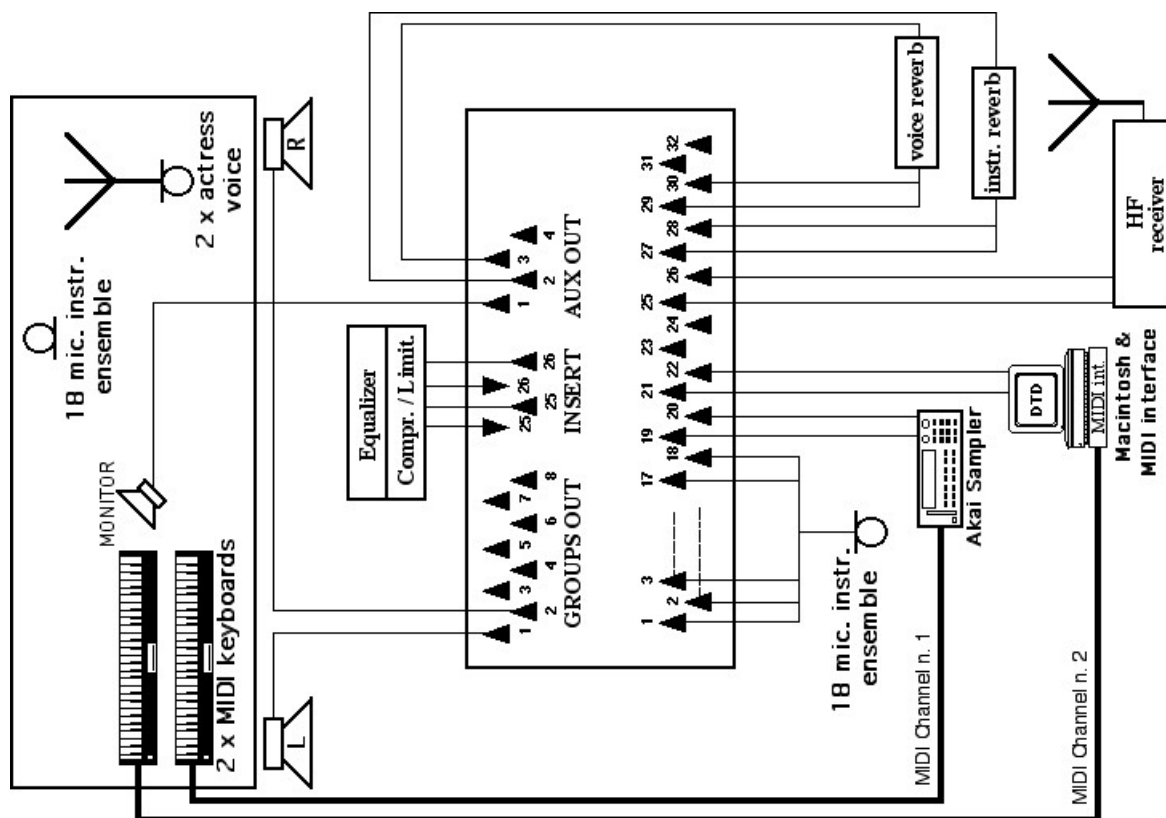
File	Type	Author(s)	Comment
Patch_sounds_CORRECTED_18	Patch		Patch version corrigé /update samplor 2018
patch&sounds	All-in-one	D. Poissonnier	
CASSANDRE2009-MIXSANSVOIX.aif	Audio file(s)		For rehearsal purpose only - DO NOT DISTRIBUTE !
MasterSansVoixCassandraOrigineCD.aif	Audio file(s)		For rehearsal purpose only - DO NOT DISTRIBUTE ! (alternate version)

## Instructions

### Audio Setup

The electronic part of *Cassandra* requires a stereo frontal diffusion. The voice and the ensemble should be amplified. No real time transformation.

### Audio/MIDI setup diagram - General Stage, Audio and MIDI Setup



### Software setup

The `_cassandra-comedie-2015-09edit` folder contains all the applications, patcher source files, sound files, etc. needed for the Macintosh computer to perform the piece.

The source files are provided so that you can eventually modify them, if you have your own licenced Max application.

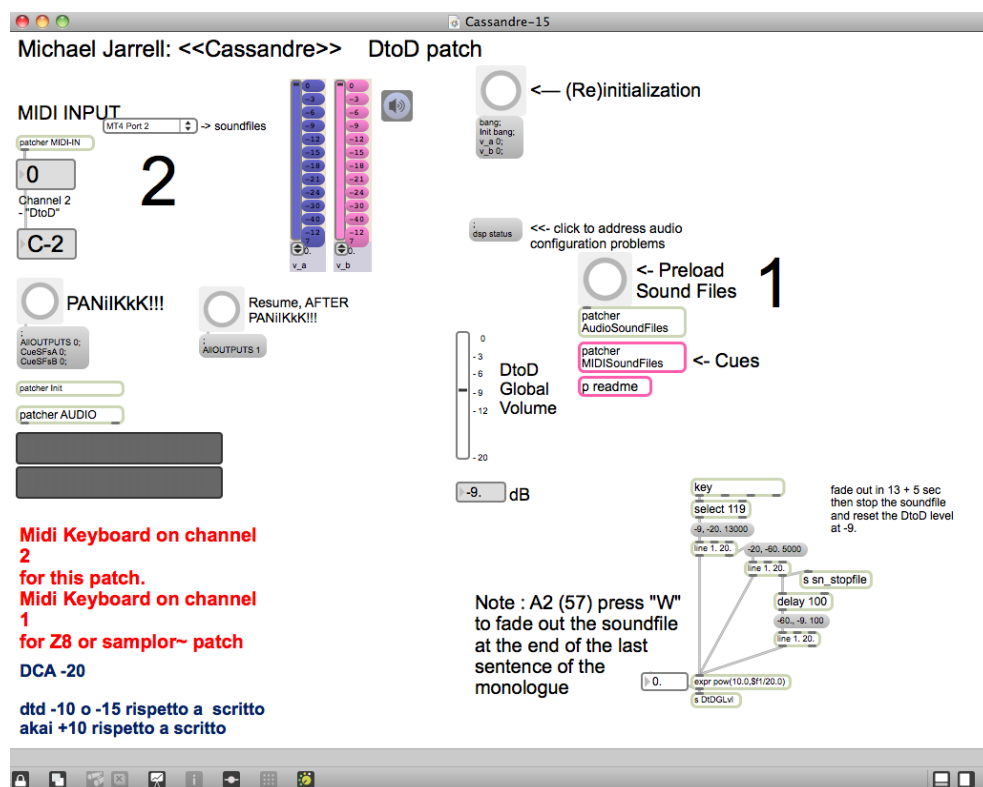
For the *Cassandra* patch, put the `cassandra-comedie-2015-09_edit/Max` folder in your max preferences, then load `_Cassandra15.maxpat`.

Max Sampling rate should be set to 44.1 kHz, Vector Size 64. Overdrive On.

For the *cassandra* software sampler (sampler~), just load the project `CassandraSampler.maxproj` located in `cassandra-comedie-2015-09_edit/CassandraSampler`.

### Patches presentation - Usage of the Max/MSP Patcher

**Cassandra\_15**, DtoD sounds, Midi channel 2:



In the present version, the Max/MSP patcher only implements the so-called "DtoD" (direct to disk): the playing of sound files triggered by MIDI pitches from the 88 key keyboard. The patcher could ultimately also include an implementation of the sampler part, in replacement of the Akai sampler. However, elements of the patcher concerning this possibility are presently unused. Consequently, the patcher feeds only two audio outputs (see **dac~ 1 2** object in the **AUDIO** sub-patcher).

After installation (see "Max/MSP Patcher Installation" above) the main Max/MSP patcher is ready at once upon opening. Only the preload of the sound files must be performed manually, by clicking on the main patcher's button marked **Preload Sound Files**.

The Max/MSP patcher receives **MIDI Note On** messages from the keyboard, on **MIDI Channel n° 2** (two), and triggers the appropriate sound files.

The audio output level can be modified with the **DtoD Global Volume** potentiometer. It is set to -9 dB by default. This default value can be changed permanently.

At any time, the **C7** key (MIDI pitch 108) can be played to stop a file during its playback. Certain other keys, according to the score, also intentionally stop a playing sound. Some other keys have no effect.

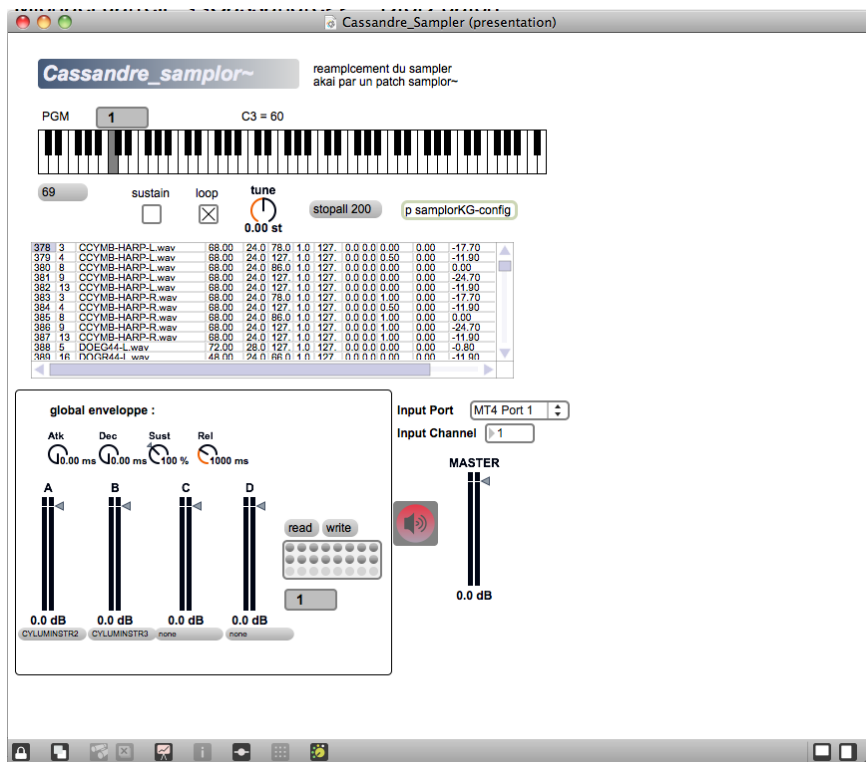
The **[x]** key of the computer keyboard can also be used to stop playback.

It is possible to **simulate manually the incoming of a MIDI Note On** from the keyboard, in order to test the patcher. Open the **MIDI-IN** sub-patcher with a double-click. You can then click in the right hand number box marked **To simulate a pitch manually**, and type in the desired MIDI pitch followed by **return**, or use the onscreen keyboard.

The left hand side of this sub-patcher is intended for future implementation of the sampler, and is presently unused.

**Cassandre\_sampler, samplers sounds, Midi channel 1 :**





Select the appropriate midi input with the menu.

Select the audio output with the dsp status manu.

Check program changes.

Levels tuning and envelope are stored and recalled on a program-by-program basis using the preset object.

You can save and load your own configuration, but note that current balance and envelope were adapted with the composer.

## Performance notes

keyboard 1 : A2 (57) or press "W" to fade out the soundfile at the end of the last sentence of the monologue.

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## Program note

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Ce monodrame a été inspiré par la comédienne suisse Marthe Keller. Le texte, de l'écrivain allemand Gerhard Wolf, est basé sur le livre de Christa Wolf, *Kassandra*, interprétation moderne du drame grec. Deux versions, musicalement identiques, sont envisagées : la première en français, pour le théâtre du Châtelet, et la deuxième en allemand. L'ensemble est constitué de 18 musiciens, auxquels s'ajoute une partie électronique constituée d'échantillons déclenchés par un clavier dans l'orchestre. Le défi est d'intégrer les sons électroniques dans l'orchestre traditionnel, ceci pour élargir le champ des sonorités d'une manière cohérente ; ce n'est qu'à deux occasions, pendant une heure que dure la pièce, que l'électronique, pour des raisons dramaturgiques, joue un rôle de premier plan.

None

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