

Misato Mochizuki  
*En arcades*  
1997

Documentation-2023  
2023



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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

- Sept. 30, 1997, Paris, Ircam, Espace de projection, Cursus de composition

Publisher : Inédit

### Detailed staff

- clarinet

### Realisation

- Hans Tutschku

### Useful links on Brahms

- [En arcades](#) for clarinet and electronics (1997), 12mn
- [Misato Mochizuki](#)

## Version related information

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Performance date: Sept. 30, 1997

Documentation date: Sept. 7, 2023

Version state: valid, validation date : Sept. 8, 2023, update : Nov. 1, 2023, 11:48 p.m.

### Documentalist

yann brecy (yann.brecy@ircam.fr)

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

### Realisation

- Pierre Dutrieu (Performer)
- Alexandre Mihalic (Assistant)
- Franck Rossi (Sound engineer)
- Henri Emmanuel Doublier (Light designer)

Version length: 12 mn

Default work length: 12 mn

### Upgrade Motivation

Update of documentation in english

### Other version(s)

- [Misato Mochizuki - En arcades - Forked Documentation-2023 \(Nov. 1, 2023\)](#)
- [Misato Mochizuki - En arcades - transfert-boites-2016 \(Jan. 11, 2016\)](#)

## Electronic equipment list

### Computer Music Equipment

- 1 MacBook Pro - *Apple Laptops* (Apple)
- 1 Max 8 - *Max* (Cycling74)
- 1 Sound Board - *Sound Board*  
with at least 2 outputs
- 1 BCF 2000 - *MIDI Mixer* (Behringer)  
Or equivalent. Optional
- 1 Footswitch / Sustain Pedal - *Footswitch / Sustain Pedal*
- 1 MIDI converter - *MIDI Converter*  
Pedal to Midi converter
- 1 MIDI interface - *MIDI Interfaces*

### Audio Equipment

- 1 Microphone - *Microphone*  
for the clarinet, in an aerial setup
- 2 Loudspeaker - *Loudspeakers*  
In a stereo setup for clarinet amplification
- 6 Loudspeaker - *Loudspeakers*  
for the electronics diffusion
- 1 Mixing Console - *Mixing Console*  
With sufficient inputs and outputs
- 1 Reverberation Processor - *Reverberation*

**Files**

<b>File</b>	<b>Type</b>	<b>Author(s)</b>	<b>Comment</b>
<a href="#">Mochizuki-EnArcades-2023</a>	Patch	Sébastien Naves	Max8
<a href="#">Score</a>	Score	Sébastien Naves	

## Instructions

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# Misato Mochizuki

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## En arcades (1997) Instructions

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For any representation of the piece, the user must adress the composer.

### Presentation

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The piece was made at Ircam during the cursus program on Composition and Computer Music 1996-1997.

*detailed formation*

- Solo Clarinet
- Electronics, for 6 outputs

### Equipment list

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#### Computer Music equipment

- 1 MacBook Pro - *Apple Laptops* (Apple)
- 1 Max 8 - *Max* (Cycling 74)
- 1 midi interface
- 1 digital audio interface with at least 2 outputs
- 1 Footswitch / Sustain Pedal
- 1 Pedal to Midi converter
- 1 BCF 2000 or equivalent - *MIDI Mixer* (Behringer) *optional*

#### Audio equipment

- 2 loudspeakers in a stereo setup for clarinet amplification
- 6 loudspeakers for the lectronics diffusion
- 1 microphone for the clarinet, in an aerial setup
- 1 stereo reverberation module
- 1 mixing desk with sufficient inputs and outputs

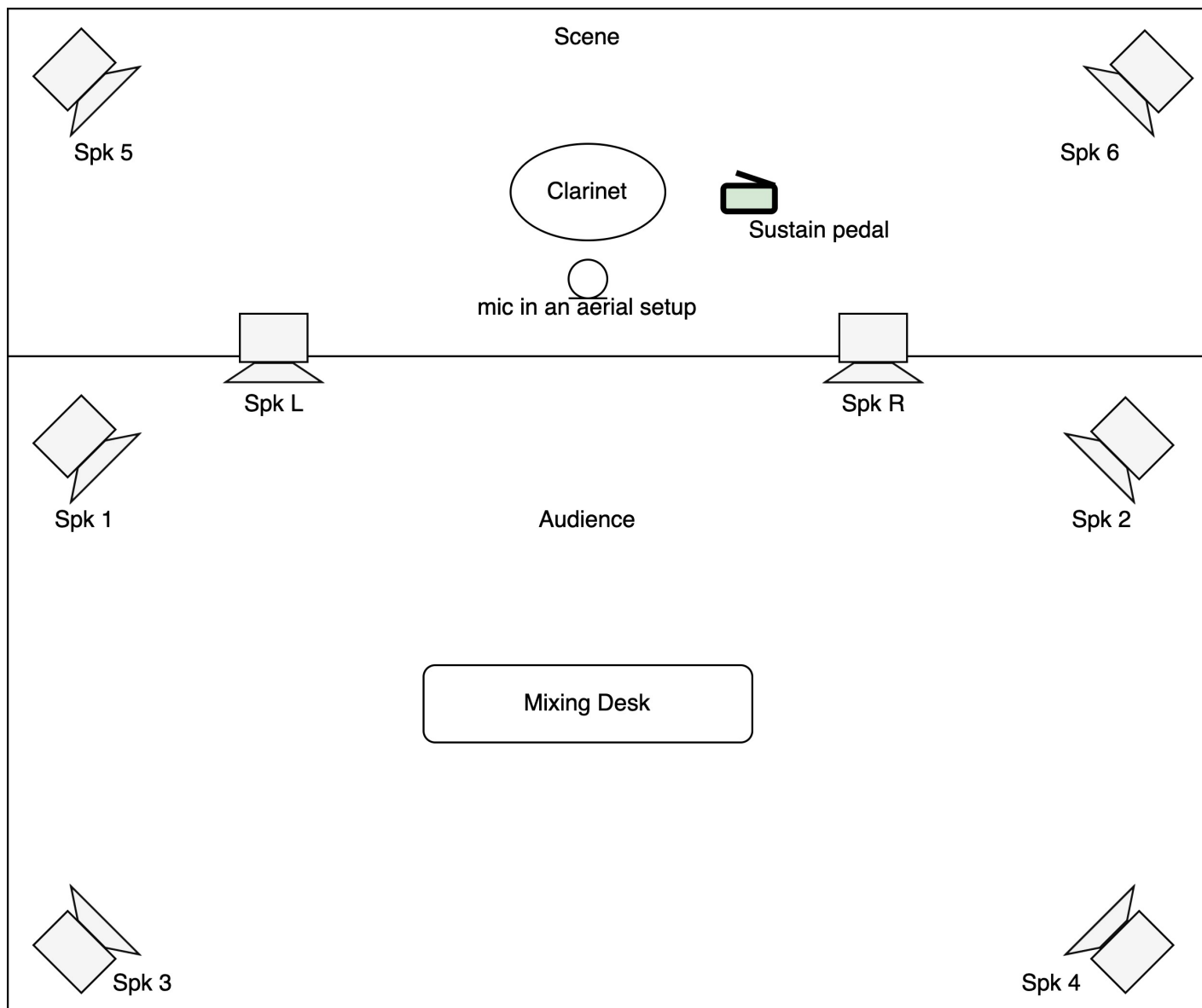
### Audio Setup

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- The electronics consists in 3 stereo audio files and a Max Patch
  - Aiff.1-bounced
  - Aiff.2-bounced
  - Aiff.3-bounced
  - EnArcades-2023-v5.maxpat
- The electroacoustic part is comprised in the Max patch. The audio output of max is send to the loudspeaker system following the connection diagram.
  - dac 1&2 must be send to speaker pairs 1&2, 3&4, 5&6, L&R.
  - speaker pairs 1&2, 3&4, 5&6 effectively receive identical signal

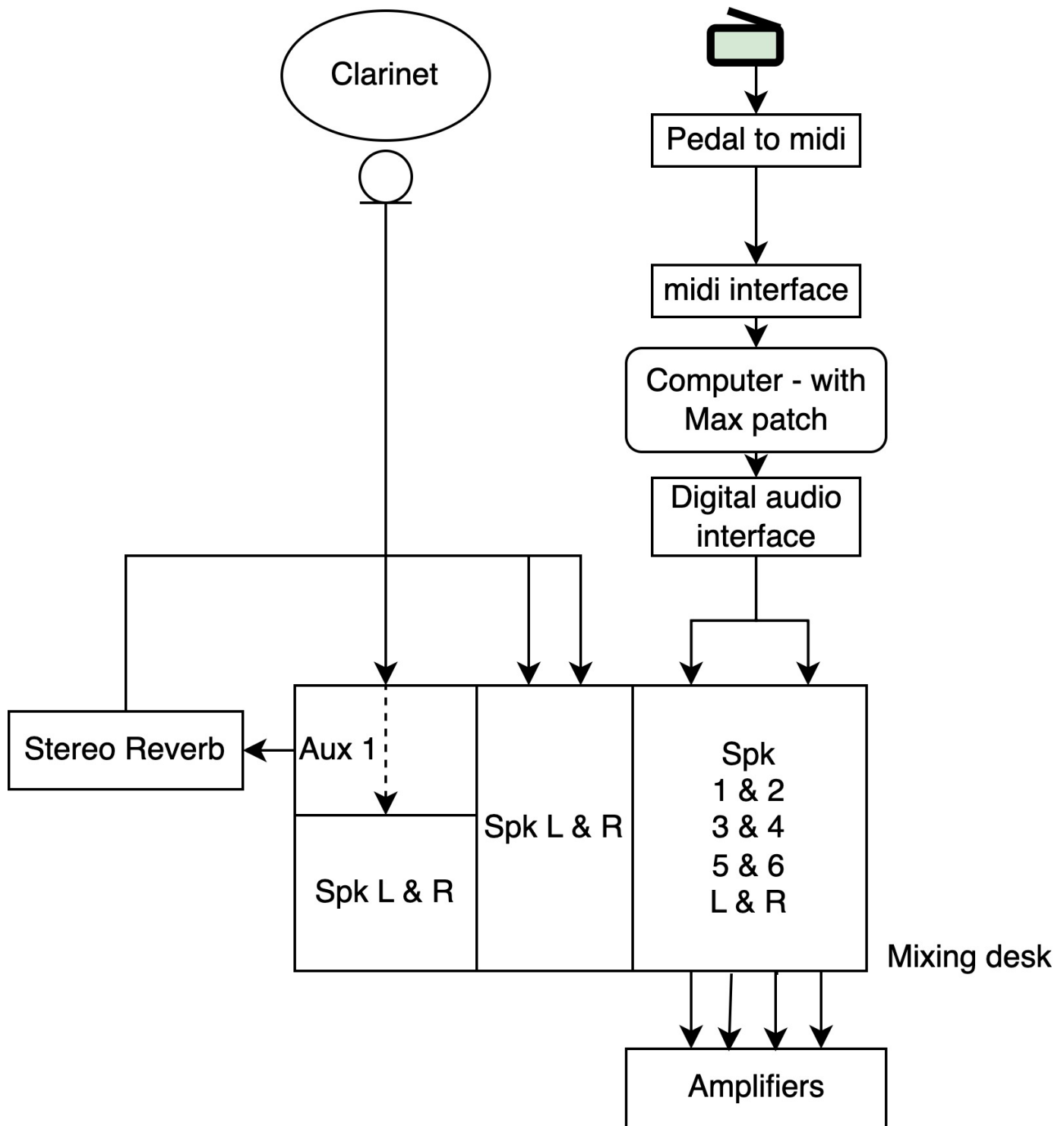
### General & Loudspeaker Setup

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## Connection diagram





## Midi Setup

A footswitch/Sustain pedal with the musician to trigger the electronic event

## Patch

### Initialization routine

- Open *EnArcades-2023-v5.maxpat* in Max8
- SR : 44,1kHz
- Check the pedal (midi input device, controller number, polarity...)
- Dac on
- Toggle the pedal activation

Please note that a *read me* is at your disposal inside the patch

### Shortcut

- *Spacebar* for triggering events and simulate pedal activation
- *s* to stop the sound

### Presentation

# Misato Mochizuki - En Arcades (1997)

2023 by S.N.

p "read me" — double click

**Soundfile:**

Current soundfile: \*\*\*\*\*

p aiffplayer  
p Load-sounds  
p More-setup  
p Events

Play soundfile 1, 2 or 3

1 2 3

restart STOP sound "s"

Aiff.2-bounced ▾  
Set + show Next event

click

**Pedal:**

pedale/space bar activation

p next-event  
p Pedal  
p Midi

4 Pedal monitor Pedal simulation "space bar"

click

select input MIDI device for pedal

to Max 1 ▾ 2

val num

0 0

Change polarity

**Startpoints in soundfile:**

Set startpoint of :

1 Aiff.1-bounced ▾ 2 0 Min. 0 Sec. 3 OK

Undo startpoint of:

1 Aiff.1-bounced ▾ 2 All soundfiles

Monitor:

File	Min.	Sec.
1	0	0
2	0	0
3	0	0


1 **Audio config**

Master

0.0 dB

3

Main Patch

- 1 Choose an appropriate Audio output : #1.
- 2 To be able to use the pedal: choose the right input MIDI device in the "input" menu i: #2  
by default the controller numbered 64 should be received with values 0 or 127.  
Change the controller number if needed with the button   
Change the polarity if needed.  
Pedal monitor will flash if pedal is properly received !
- 3 Turn on the audio : #3
- 4 activation of the pedal or the "spacebar" key to play : #4

The playback of a soundfile can also be stopped by a program change on the synthesizer or "s" key.

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## STARTPOINTS

To set a startpoint in the soundfiles:

1) Choose a soundfile then 2) set the time and 3) click OK

Each time you play the soundfile, it will start at this "startpoint".

The chosen startpoint will stay until you undo it.


### WARNING

If the time you choose for the startpoint exceeds the length of the soundfile, the computer won't play the soundfile.

To prevent this, the startpoint that have been chosen is verified in the patcher "verify-point". If the point does indeed exceed the length of the soundfile, the message "THIS STARTPOINT EXCEEDS THE LENGTH OF THE SOUNDFILE !!!" appears in the max window, and the startpoint will not be set in the soundfile.

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*Read me* content

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## Program note

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L'idée-clé de cette pièce est inspirée du mandala (du sanskrit signifiant « cercle »), un concept cosmologique originaire d'Inde : sur une surface plane sont figurés les quatre points cardinaux, déterminant quatre directions et un centre, d'où partent des cercles concentriques : les cercles des saisons, des couleurs (noir, blanc, rouge, bleu, jaune au centre), des matériaux (pierre, métal, porcelaine, bois, terre au centre), mais aussi les cercles de la connaissance, des sensations, de la stabilité, et du lotus (ou du monde spirituel). Il existe des points de passage entre ces cercles ainsi fermés, représentant les cheminements de l'âme méditative.

J'ai voulu réaliser la musique sur ce modèle : les transitions entre éléments musicaux (tempi, timbres, rythmiques, figures) s'effectuent à des vitesses différentes, comme les révolutions planétaires. Le titre *En arcades* évoque les courbes en forme d'arc dessinées par ces trajectoires.

Il s'agit de mon premier essai utilisant un dispositif électronique. La plupart des sons ont été obtenus à partir de synthèses croisées entre des échantillons de clarinette (y compris le souffle et les bruits de clé) et des matériaux percussifs (bois, métal, porcelaine, verre, etc). La clarinette soliste se situe au croisement de toutes les transitions entre éléments.

Misato Mochizuki, programme des concerts du Coursus de composition de l'Ircam, 29-30 septembre 1997, Espace de projection de l'Ircam.

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