

Jacques Lenot
Isis und Osiris
2014
Premiere
2013



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

- Jan. 13, 2014, France, Paris, Ircam, Espace de projection

Publisher : l'Oiseau Prophète

Detailed staff

- alto flute, oboe d'amore, basset horn, bassoon, horn, trumpet [en ut] , trombone

Realisation

- Serge Lemouton

Useful links on Brahms

- [Isis und Osiris](#) mixed sound installation for wind septet and electronic environment (2009-2012), 1h0mn
- [Jacques Lenot](#)

Version related information

First performance

Performance date: Jan. 13, 2014

Documentation date: May 23, 2013

Version state: valid, validation date : May 3, 2018, update : Jan. 17, 2022, 6:42 p.m.

Documentalist

Serge Lemouton (Serge.Lemouton@ircam.fr)

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

Realisation

- Julien Aléonard (Sound engineer)
- Serge Lemouton (Computer Music Designer)

Version length: 60 mn

Default work length: 60 mn

No other version available

Electronic equipment list

Computer Music Equipment

- 1 MacBook Pro - *Apple Laptops* (Apple)
OS X 10.6
- 6 MacPro - *Apple Desktops* (Apple)
Concert, HOA, WFS1, WFS2, WFS3, WFS4,
- 7 iPad - *Tablets* (Apple)
one for each musician (touchOSC)
- 1 SSD - *SSD*
- 1 Live - *Music Software* (Ableton)
version 8.4 32 bits
- 1 Max 5 - *Max* (Cycling74)
- 2 Fireface 800 - *Sound Board* (RME)
- 1 BCF 2000 - *MIDI Mixer* (Behringer)

Audio Equipment

- 7 Loudspeaker - *Loudspeakers*
instrument sound reinforcement
- 1 WFS Espro - *WFS* (Ircam)
256 loudspeakers
- 1 HOA Espro - *Ambisonie* (Ircam)
75 loudspeakers
- 1 DM2000 - *Digital Mixers* (Yamaha)

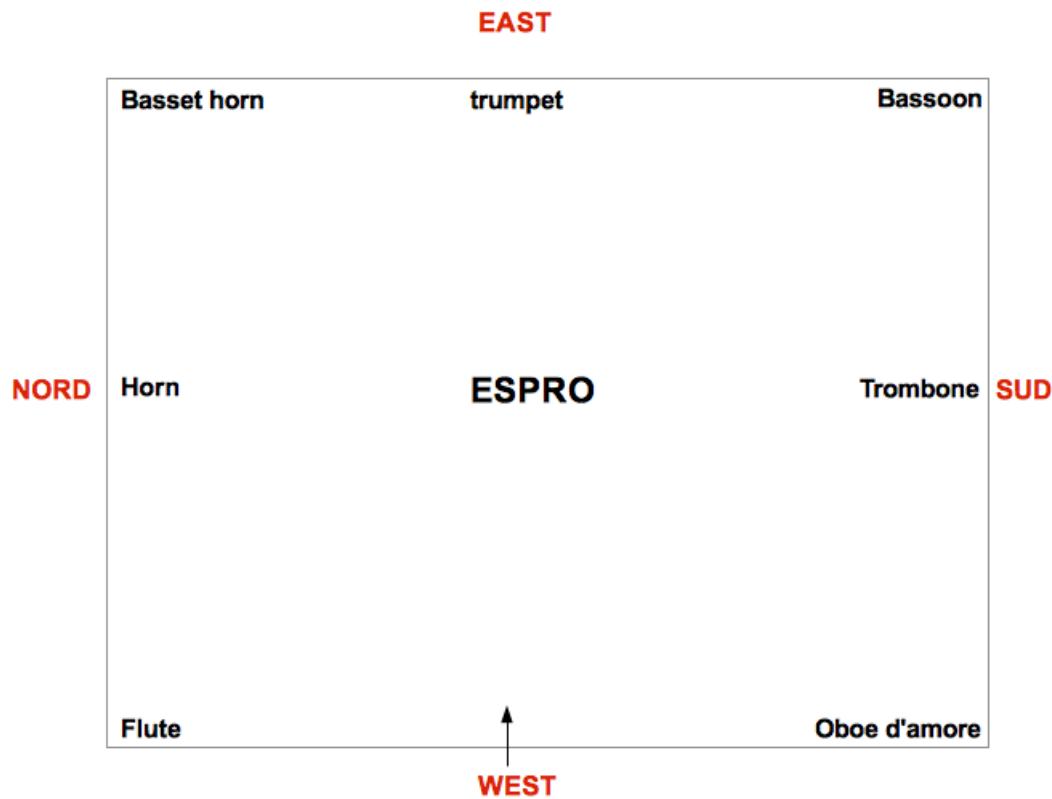
Files

File	Type	Author(s)	Comment
Finale-last-version.zip	Score	Jacques Lenot	Septuor score in Finale
ISISetOSIRIS-concert_patches.zip	Patch	Serge Lemouton	Final version of the Live session and spatialisation patches (updated for the concert)
ISIS_UND_OSIRIS-sounds.dmg	Patch	Serge Lemouton	
Stage setup	Setup	Pascale Bondu	
partitions_de_diffusion.zip	Score	Serge Lemouton	Live session screenshots

Instructions

Stage Setup

The 7 musicians are located around the audience, slightly and locally amplified



Audio Setup

This piece makes use of the complete Espace de Projection sound diffusion system (HOA + WFS) for a grand total of 339 loudspeakers.

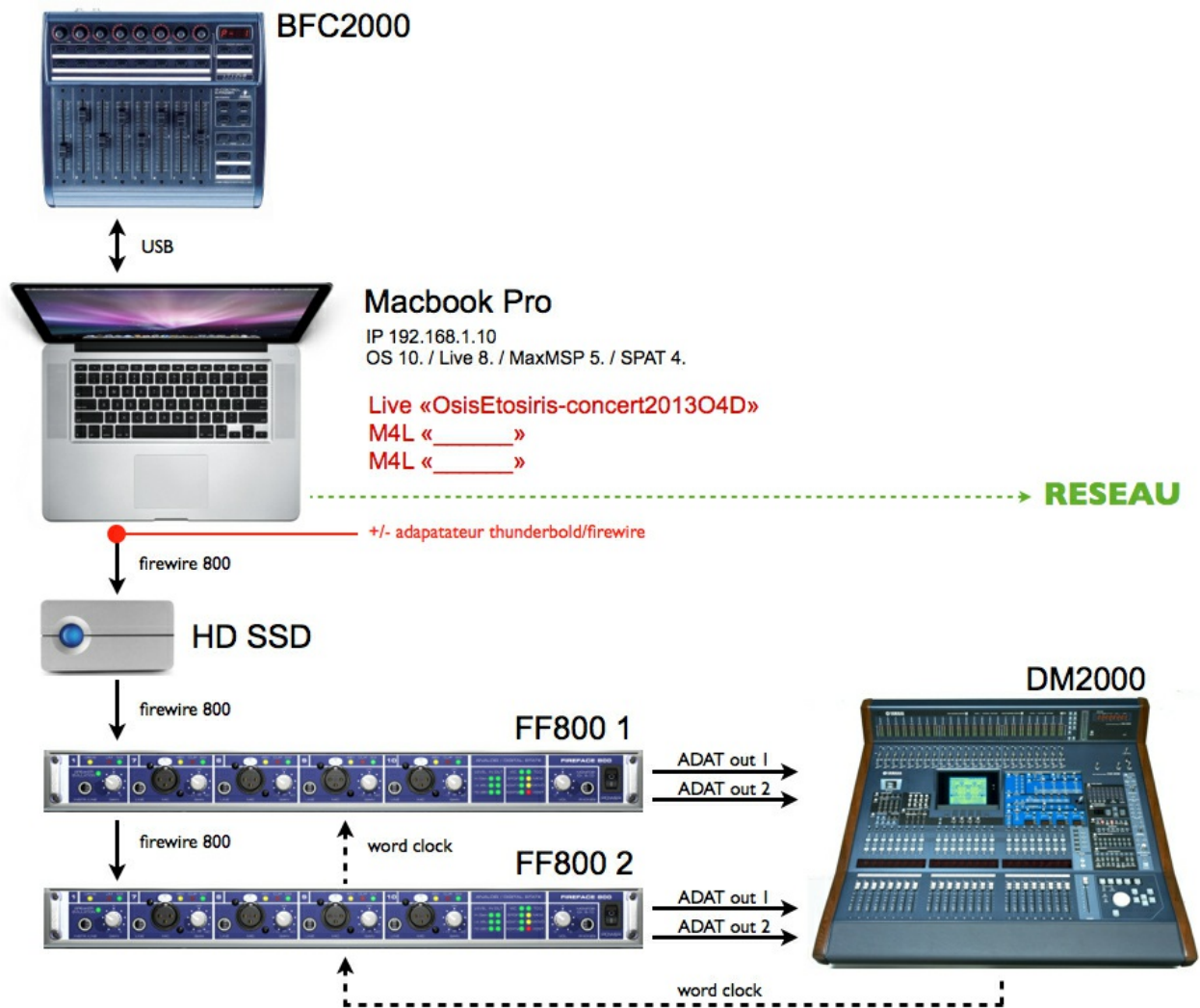
The electroacoustic part of *Isis und Osiris* consists in a 24-channel soundfile, sent to the HOA and WFS systems :

- 4 4-channels virtual orchestras
- 4 2-channel percussion-type sound

this channels are played from Ableton Live (on the Macbook Pro) to Spatialisateur Max patches (Mac Pro HOA, WFS1, WFS2, WFS3 and WFS4).

Hardware Setup

Macbook Pro send the 24 audio channels to Yamaha DM2000 with 2 RME Fireface 800 (ADAT connexions)

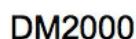


The Yamaha DM2000 mixer sends the audio signals to the Mac Pro CONCERT (ADAT connexions).

The Mac Pro CONCERT plays a simple Max patch (*Isis-matriceMADI.maxpat*) to convert audio signal from ADAT to MADI.

Mac Pro CONCERT send audio signal to 5 Mac Pro : HOA, WFS1, WFS2, WFS3 and WFS4 (MADI connexion).

Each Mac Pro (HOA, WFS1, WFS2, WFS3 and WFS4) runs a Max spatialisation patch (*I**sisSPAT-6-espro.maxpat, WFS_OSIRIS_SUD2_4sources.maxpat, WFS_OSIRIS_NORD4_4sources.maxpat...*)



In Live preferences set the surface control, input and midi output to “BFC2000”

44,1 Khz

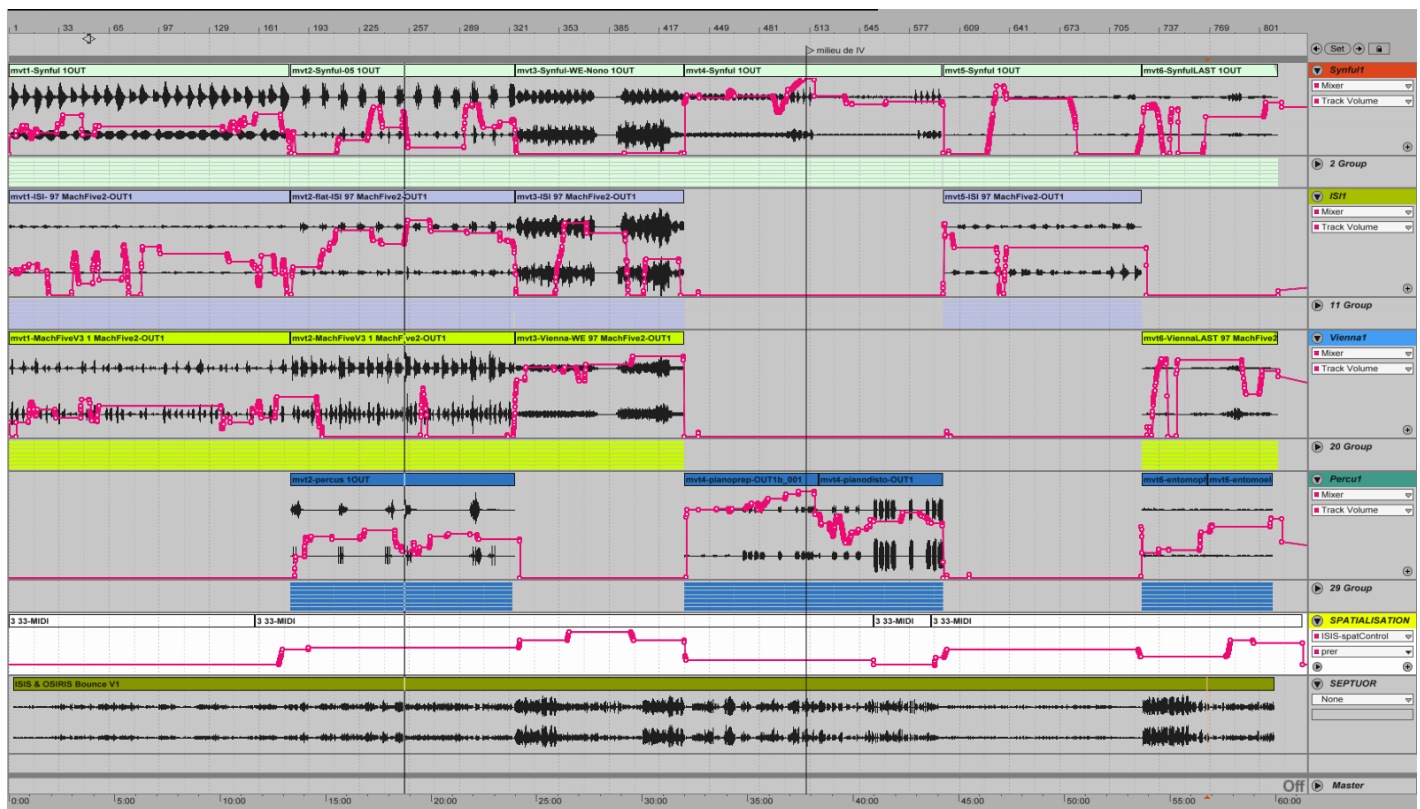
out : Fireface 800 1 (FF800 1) + Fireface 800 2 (FF800 2) (56 in/56 out)

In configuration output, select :

from 1/2 to 15/16 (16 channels to HOA) (FF800_1)

from 29/30 to 35/36 (8 channels to WFS) (FF800_2)

LIVE SESSION “OsisEtosiris-concert2013O4D”



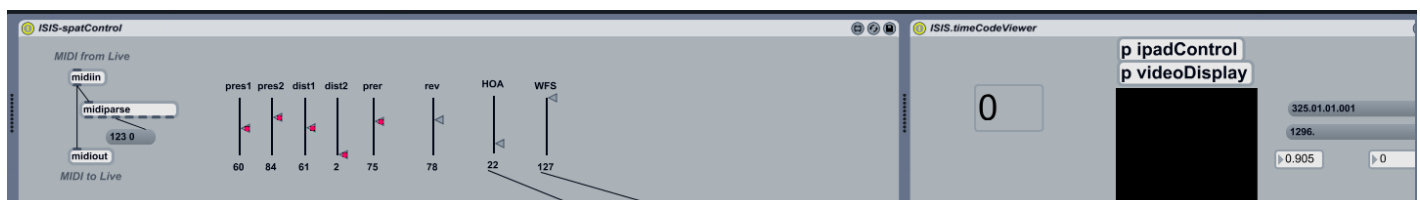
Audio Outputs

Three groups are send from Ableton Live to the HOA sound diffusion system (16 channels, from 1/2 to 15/16).

1. *Synful*
2. *Isis*
3. *Vienna*

The last group *Percu* is sent to the Wave Field Synthesis system (8 channels, from 29/30 to 35/36)

MaxForLive Patches



ISIS-spatControl controls some spatialisation parameters in the Mac Pro patch using the OSC protocol:

HOA : `udpsend 192.168.1.10`

WFS1 : `udpsend 192.168.1.1`

WFS2 : `udpsend 192.168.1.2`

WFS3 : `udpsend 192.168.1.3`

WFS4 : `udpsend 192.168.1.4`

ISIS.timeCodeViewer send visual cues to musicians (current bar number and beats are sent to 7 iPads)

Direct to disk

To play the 24 audio channels, a fast hard disk is required (such as an external SSD / thunderbolt)

WFS and HOA Software setup

MAC PRO HOA

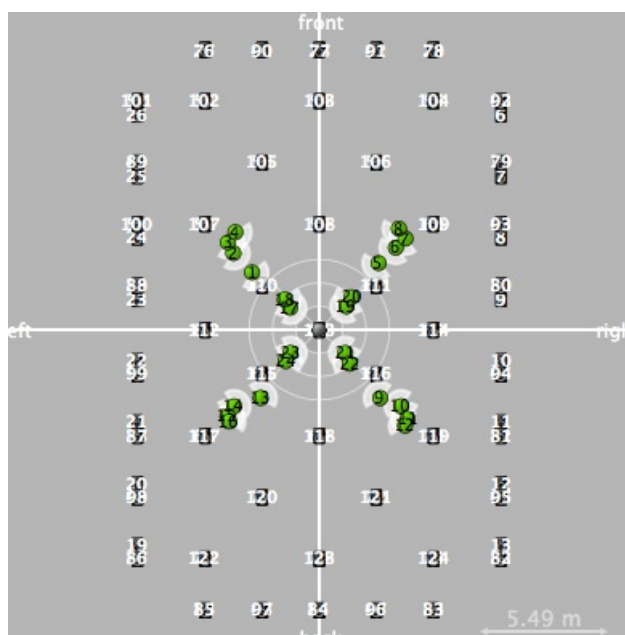
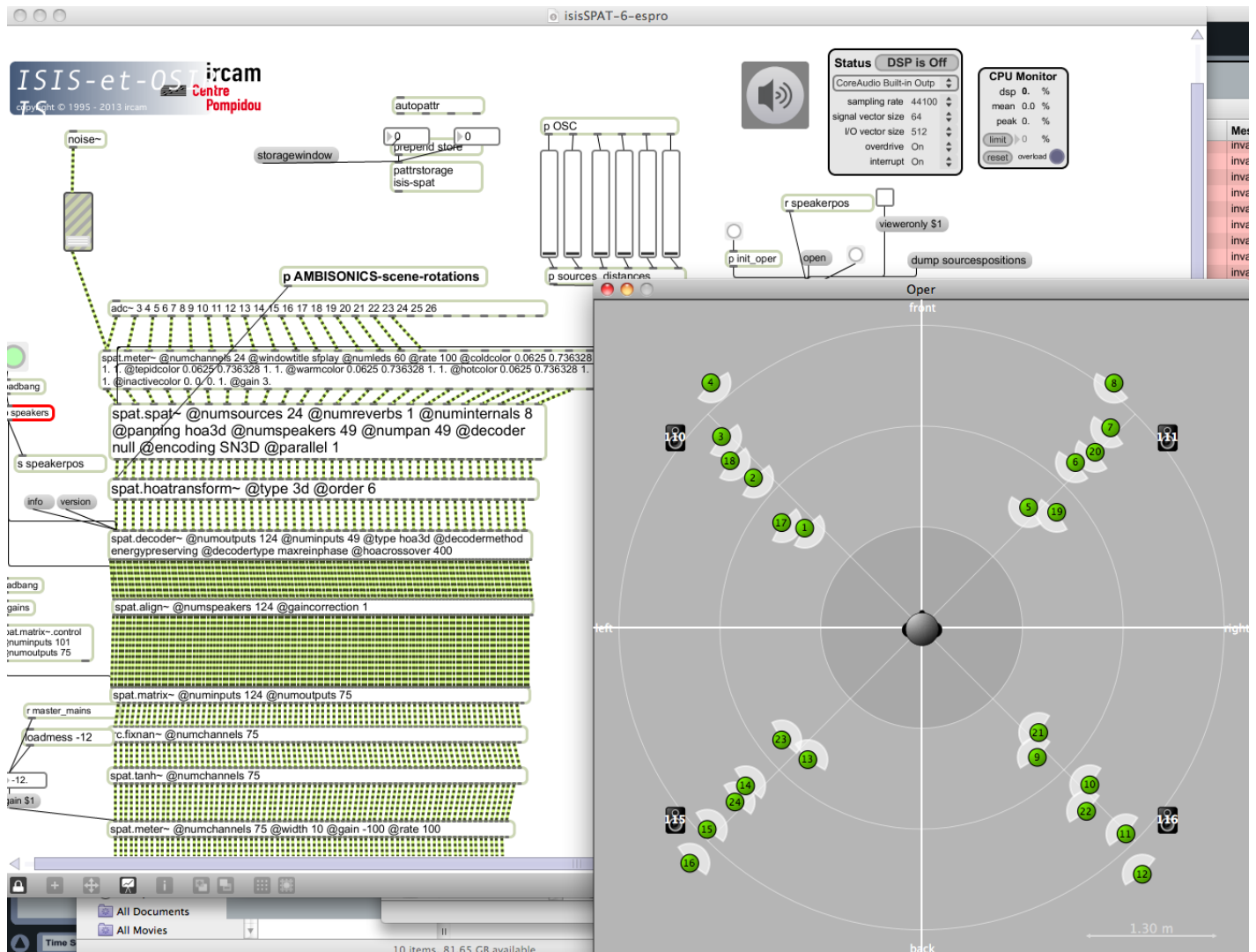
IP 192.168.1.10

MaxMSP “isisSPAT-6-espro”

MaxMSP audio input : MADI (du Mac Pro concert)

Audio output : MADI + FF400 (FF400 pour les sub)

Level : -12 dB





MAC PRO WFS1

IP 192.168.1.1

MaxMSP “_“

MaxMSP audio input : MADI (du Mac Pro concert)

Audio output : MADI

Level : _ dB

MAC PRO WFS2 (SUD)

IP 192.168.1.2

MaxMSP patch : *WFS_OSIRIS_SUD2_4sources*

MaxMSP audio input : MADI (du Mac Pro concert)

Audio output : MADI

Level : -6 dB

MAC PRO WFS3

IP 192.168.1.3

MaxMSP “_“

MaxMSP audio input : MADI (du Mac Pro concert)

Audio output : MADI

Level : _ dB

MAC PRO WFS4 (NORTH)

IP 192.168.1.4

MaxMSP patch : *WFS_OSIRIS_NORD4_4sources*

MaxMSP audio input : MADI (du Mac Pro concert)

Audio output : MADI

Level : -6 dB

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