

Hilda Paredes

*Altazor*

2011

2023 Update to Max8  
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

- Nov. 18, 2011, France, Paris, Opéra Bastille, Amphithéâtre, Festival d'Automne à Paris

Publisher : University of York Music Press

### Detailed staff

- soloist: solo baritone
- flute, oboe, clarinet, trombone, percussionist, piano, violin, viola, cello

### Realisation

- Lorenzo Bianchi

### Useful links on Brahms

- [Altazor for baritone, ensemble and electronics \(2011\)](#)
- [Hilda Paredes](#)

## Version related information

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First performance

Performance date: Nov. 18, 2011

Documentation date: Nov. 21, 2023

Version state: valid, validation date : Nov. 30, 2023, update : Nov. 30, 2023, 4:14 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

- Lorenzo Bianchi (Computer Music Designer)

Version length: 25 mn

### Upgrade Motivation

Upgrade from Max 5 to 8, creating patch and piece documentation in english

### Other version(s)

- [Hilda Paredes - Altazor - festival-dautomne-2011 \(Nov. 18, 2011\)](#)

## Electronic equipment list

### Computer Music Equipment

- 2 MacBook Pro - *Apple Laptops* (Apple)  
1 main, 1 spare
- 1 Max 8 - *Max* (Cycling74)
- 2 Fireface 800 - *Sound Board* (RME)  
1 main, 1 spare
- 1 BCF 2000 - *MIDI Mixer* (Behringer)
- 1 Pedal - *Pedal*  
Sustain Pedal for the conductor
- 1 MIDI converter - *MIDI Converter*  
Pedal to midi converter

### Audio Equipment

- 6 Loudspeaker - *Loudspeakers*  
6 speakers for the electronics
- 2 subwoofer - *Subwoofers*

**Files**

<b>File</b>	<b>Type</b>	<b>Author(s)</b>	<b>Comment</b>
<a href="#">Altazor_All_2023.zip</a>	All-in-one		Patch - Sound File - .json preset file
<a href="#">tech_stuff_altazor.zip</a>	Technical rider		

## Instructions

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# Hilda Paredes - Altazor (2011)

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## Presentation

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The piece was made at Ircam for the *Festival D'automne 2011* at Paris

*detailed formation*

- Baritone solist
- ensemble : Flute, Clarinet, Oboe, Percussion, Piano, Viola, Violin, Violoncello
- live electronics, for 6 output

## 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 1 input & 8 output
- 1 Footswitch / Sustain Pedal
- 1 Pedal to Midi converter
- 1 BCF 2000 or equivalent - *MIDI Mixer* (Behringer)

### Audio Equipment

- 6 loudspeakers and 2 subwoofer for the electronics diffusion
- Reverberation module for the electronics, the voice and the ensemble
- 1 mixing desk with sufficient inputs and outputs

Suggested equipment

IN	Type	Source	Suggested Equipment	Stand
1	ADC1	Violin	DPA 4061	-
2	ADC2	Alto	DPA 4061	-
3	ADC3	Cello	DPA 4061	-
4	ADC4	Voice	DPA 4065	-
5	ADC5	Flute	DPA 4068	-
6	ADC6	FluteSlap	DPA 4021	small
7	ADC7	Oboe	DPA 4021	big
8	ADC8	Clarinet	DPA 4021	big
9	ADC9	ClarinetBass	BEYER M88	small
10	ADC10	PianoL	DPA 4021	-
11	ADC11	PianoR	DPA 4021	-
12	ADC12	PianoKeyboardL	DPA 4061	-
13	ADC13	PianoKeyboardR	DPA 4061	-
14	ADC14	Vibra	SENNHEISER e609	big

<b>IN</b>	<b>Type</b>	<b>Source</b>	<b>Suggested Equipment</b>	<b>Stand</b>
15	ADC15	Vibra	SENNHEISER e609	big
16	ADC16	Cymbalum	AKG C535	big
17	ADC17	Cymbalum	AKG C535	big
18	ADC18	Toms	SENNHEISER e609	big
19	ADC19	Toms	SENNHEISER e609	big
20	ADC20	Tympani	AKG C414	big
21	ADC21	OH	AKG C535	big
22	ADAT1	DAC1		
23	ADAT2	DAC2		
24	ADAT3	DAC3		
25	ADAT4	DAC4		
26	ADAT5	DAC5		
27	ADAT6	DAC6		
28	ADAT7	Send Reverb elecL		
29	ADAT8	Send Reverb elecR		
30	ADAT9	DAC1 spare		
31	ADAT10	DAC2 spare		
32	ADAT11	DAC3 spare		
33	ADAT12	DAC4 spare		
34	ADAT13	DAC5 spare		
35	ADAT14	DAC6 spare		
36	ADAT15	N.C.		
37	ADAT16	N.C.		
38	AES1	Reverb elec L	PCM 81	
39	AES1	Reverb elec R	PCM 81	
40	AES2	Reverb ensemble L	M2000	
41	AES2	Reverb ensemble R	M2000	
42	SPDIF	Reverb voice L	PCM 80	
43	SPDIF	Reverb voice R	PCM 80	

<b>OUT</b>	<b>Type</b>	<b>Source</b>	<b>Suggested Equipment</b>
1	DAC1	#1	D&B E12
2	DAC2	#2	D&B E12
3	DAC3	#3	D&B E12
4	DAC4	#4	D&B E12
5	DAC5	#5	D&B E12
6	DAC6	#6	D&B E12
7	DAC7	#SUB L	LA SB118
8	DAC8	#SUB R	LA SB118



OUT	Type	Source	Suggested Equipment
9	ADAT1		
10	ADAT2		
11	ADAT3		
12	ADAT4		
13	ADAT5		
14	ADAT6		
15	ADAT7		
16	ADAT8		
17	ADAT9	ADC voix spare	
18	ADAT10		
19	ADAT11		
20	ADAT12		
21	ADAT13		
22	ADAT14		
23	ADAT15		
24	ADAT16		
25	AES1	reverb elec L	PCM81
26	AES1	reverb elec R	PCM81
27	AES2	reverb ensemble L	M2000
28	AES2	reverb ensemble R	M2000
29	SPDIF	reverb voice L	PCM80
30	SPDIF	reverb voice R	PCM80

## General & Loudspeaker setup

Fig.1



#SUB L #1

#2 #SUB R

AUDIENCE

#3



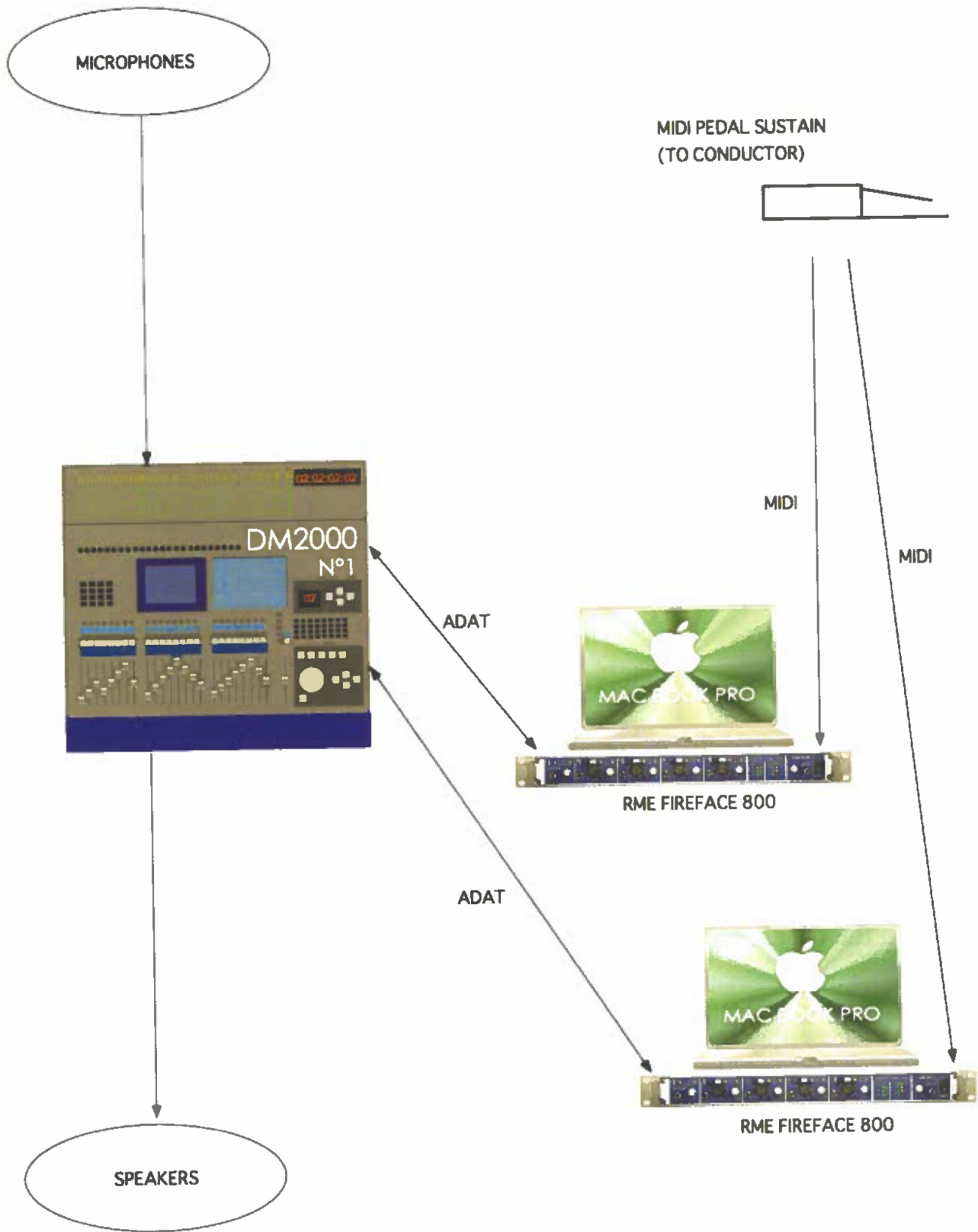
#4

F.O.H CENTERED  
OR ON THE CENTER AXIS

#5

#6

Loudspeaker setup



Wiring Diagram



Percussion setup

## Audio setup

- The electronics consists in the diffusion of multichannel audiofiles and real time processing on the voice of the barytone.
- There are three effects, *Spectral*, *Freeze* and *Munger*
- DAC 7 & DAC 8 of the Max Patch are for additional reverb
- All the electronics are comprised in the Max Patch. The audio outputs of max are sent to the loudspeaker system following the connection diagram.
- Special attention will be paid to the mixing of the real time processing on the voice with the pre-recorded files of the same nature.

## Midi setup

- A footswitch/sustain pedal with the conductor to trigger electronic events
- A midi mixer to mix the level of the real time processing.

## Patch

All you need execute (externals, sound file...) the patch under Max 8 is comprised in the zip file name "Altazor\_All"

## Initialization routine

Open the patch "Altazor\_2023.maxpat"  
Add the *paredes\_externals* folder in Max File preferences

On the main window patch :

- Define if this machine is the master or the spare

- Open the pedal reception
- Check the pedal polarity/phase, change it if necessary, by default the controller number is 64. Change it if necessary in “p midiin”
- Load the folder containing the soundfiles (“##ALTAZOR-ficheros-final-OK” by default in the archive)
- Load the .json preset file with the “read” button
- Open DAC
- Check volumes in the “mixer” part of the main patch and test with the spacebar
- check “p midiin” to use a midimixer

## DSP Status

- SR : 44.1 kHz
- IOVS/VS: 64
- Overdrive ON

## Shortcut

Spacebar to go to the next event

## Presentation

The screenshot displays the ALTAZOR software interface. At the top, there are tabs for "p midiin", "p playlist\_ok", "p freeze", "p munger", and "p spectral". Below these are buttons for "open" and "close", and a "master slave" toggle. A large "X" button is labeled "DAC". A "RESET" button is shown as a grey circle, and a "BANG or 'Spacebar' to go to next event" button is shown as a green circle. A "pedal phase" display shows "127 0". A "load sounds" button is a grey circle with a white circle inside, and a "pedal on off" button is a grey square with a white "X". A "Mixer" section shows five vertical sliders for "spectral", "munger", "freeze", "sfplay", and "master", with numerical values 0, 0, 0, 139, and 130 respectively. A "INPUT level" display shows "0". A "presets" section shows "ALTAZOR" and "p building\_preset" with a "read" button and a "write" button. A "presets recall" section shows a large "1" and a "click before to close" button. A "window flags close, window exec" button is also present. A legend at the bottom left lists steps 1 through 6, and a "Shortcut" section indicates that the Spacebar is used to go to the next event. The bottom right corner contains the text "2023 - revision for Max8 IRCAM".

1 Define if this machine is the master or the spare

2 Open the pedal reception

3 Check the pedal polarity

4 Load the soundfiles

5 Load the .json preset


6 Open DAC and test

**Shortcut** Spacebar to go the next event

Check "p midiin" for midi controller

2023 - revision for Max8  
IRCAM

main patch

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