

HOW TO SPEND PLEASANT TIME AMONG NEW FRIENDS WITH OUR PASSION?
OUR PASSION TO SHARE TO PERFORM UNHEARD INSTRUMENTAL SPATIAL ELECTRIC MUSIC?

LES GUITARES VOLANTES IN DUET ARE READY TO PROPOSE A WORKSHOP.
TO HELP EVERY ONE WHO WISH TO PLAY IN REAL TIME THEIR SOUNDS IN SPACE.

Rather than giving some gigs here and there, being and staying strangers among human audience's minds, and to be forgotten as "unknown phenomenon", I think it is more satisfying to share our spatial knowledge and toys: the unique real time spatialisators to enjoy to fly together our electric sounds in space :) My 7 spatialisators Orfeusz 206 I have are unique, I know (being in spatial live music since 1979), with no equivalent in all music world on Earth. These machines give the possibility to generate audio trajectories and to play it in real time with our sounds from our electric musical instruments.

Why it is important, indeed essential to share our precious experience and knowledge with new friends? Friends create Conviviality and Conviviality is generated by mutual sympathies. This is essential for original free music to exist and to evolve and develop spatial instrumental music. And also students are the way to transmit our knowledge for them to evolve the spatial music: there is so many things to do! It is just the beginning, born in 1958.

Not easy?

We know, the covid politics has generated a huge misery in the music world, especially in the circle of courageous initiative to create unheard music. The political assault against the artists and musicians living today is felt as the beginning of their original music annihilation. Here in France, it is exactly what happened: Real artists are survivors of this political hegemony. But we are not dead, yet, and above *all our music works will survive that political war against original artists and musicians*. If the music world is destroyed, starting the assaults 41 years ago (officially in France), it is because most of musicians brakes the fragile link that original music needs to exist. By staying isolated, we believe to stay safe against these hegemonic political assaults. The reign of the political hostility in the music world had never gave up since 41 years. The consequence is: original alive music from alive composers, since 41 years, stays unknown. In France it is obvious. In Europe too. All the music lovers disappeared! To explore music or "explored music" exists only because these alive music appear underground (= non official concert-halls). Today, to exist, it has to stay secret. In addition, in our restricted small music circle, by sounding your music differently being unique generates strong hostile jealousies from others that forbid us to share our music and our knowledge with everybody else. In Toulouse and elsewhere in Europe like in Sweden is a pathology. Govern by the order to close all doors: to stop any art and music resolution. I suppose, you know that already.

The best way to share to generate pleasant time (among and surrounded by a hostile general context) is to organize a WORKSHOP. With the necessary days to create original spatial electric music among friends and students. To organise that, it is, and, it is not easy: because spatial music use a complex technology (= a mechanical audio system with *lot of links: cables*).

But 1st, what electric spatial instrumental music needs, is people: Music Lovers.

Then, any place. Any place that gives us to sound a symphony of electric audio trajectories. My studio is 20m² large! A place with some minimal audio equipment. As several guitar cabinets plugged into a mixing console. I cannot export my 220 volt 50Hz recording spatial studio from Toulouse! In my spatial recording studio, to give to listen our choreosonic and polytrajectophonic electric music, I had no choice than to work with the *octophonic format for the records*. 8 channels at the same time is the maximum number of channels considered audible by the audio industry, and enough for the home context? But it gives at least to experience spatial music at home (with a 7.1 sound card and 8 loudspeakers in the room setting in box shape, 4 on the ceiling 4 on the floor).

But, a public place needs more than 8 loudspeakers/cabinets to sound the polytrajectophonic music: that to experience a proper perception of our three-dimensional space where performed "in real time" electrical instrumental sounds are flying. At least 12 better 16. A dodecaphonic or hexadecaphonic audio installation: the schematic is at page 4.

In opposition of being surrounded (= trapped by the audio industry) I created the possibility to *listen audio trajectories flying "inside the centre"*. For that, I gave to built an

omniphonic cabinet with 6 loudspeakers inside: a cube with a loudspeaker on each face of the cube-cabinet: up-down, left-right, front-behind. Wow! Impressive! *You listen the sounds moving inside, really!* Each of these cabinet needs 6 amplifiers (= 3 stereo). What I am trying to say is: for spatial electric instrumental music to work to be experienced as a marvellous phenomenon: more channels exist, more the perception of polytrajectophony is enhanced. But it is also a problem!

A centre hexaphonic cabinet + 8 peripheral cabinets make 14 channels to manage. In my small spatial studio I have 23 output and 27 loudspeakers. Imagine the ideal to use only hexaphonic cabinets in public place: $12 \times 6 = 72$ channels, 72 output from the mixing console with 36 stereo amplifiers! This the fundamental problem of spatial music! But: It can be made easier. Starting with a restrictive simply *hexaphonic space*.

My sound trajectories generators: the Orfeusz 206 work in hexaphony, with 6 audio output. It means: an Orfeusz trajectory is generated with 6 geometrical points/loudspeakers in space: a volume with 6 summits that gives a *pentahedron with 6 surfaces*: 2 triangles + 3 quadrilateral to sound.

Check at <http://centrebombe.org/livre/8.7.html> the essential meaning of sound topophony.

I detect a possible question in your mind:

Why using 12 or 16 output channels with 12 or 16 cabinets having only 6 output from the spatialisators? The answer is simple: to extend the three-dimensional space to enhance different hexaphonic possible trajectories' paths. Any trajectory depends to the path where only 2 directions are possible. This spatial extension gives to listen a *choreophony*. This by playing with the in/out routing matrix in the mixing console.

With a hexaphonic volumetric space, there is 1 hexaphonic path. With an octophonic volumetric space, there is 28 hexaphonic paths. With a dodecapronic volumetric space there is 924 hexaphonic paths. The diversity of choreosinic figures depends on number of paths possible in three-dimensional space. A path is one-dimensional space (like stereo). The changing paths process is performed by a "Pather" (a panther? Where pan means totality) who has the ability to change the 4 paths at the same time like a virtuoso playing keyboard with the routing of the mixing console.

The core of Les Guitares Volantes is 2 musicians: Laurent and I. As a duet it is possible to perform with an easier spatial set-up. 2 spatialisators Orfeusz 206 => 12 output, and any analogue mixing console can afford 12 input (like the Mackie VLZ 16x4x2).

The cabinets for our spatial instrumental electric music are electric guitar cabinet (yes! much much cheaper and accurate than P.A. cabinet: a Chinese cabinet with 2 Celestion VA 30 cost 222€, and a L Acoustic 300 watts cabinet cost at least 3500€ each for the similar sound pressure in dB/metre!).

Also, using only 2 spatialisators Orfeusz 206 gives the possibility to perform with 4 musicians, but, where 2 cannot control the speed of their audio trajectories. Or perhaps yes, to add and plug more USB access, I never tested that. The Orfeusz 206 has 2 audio input.

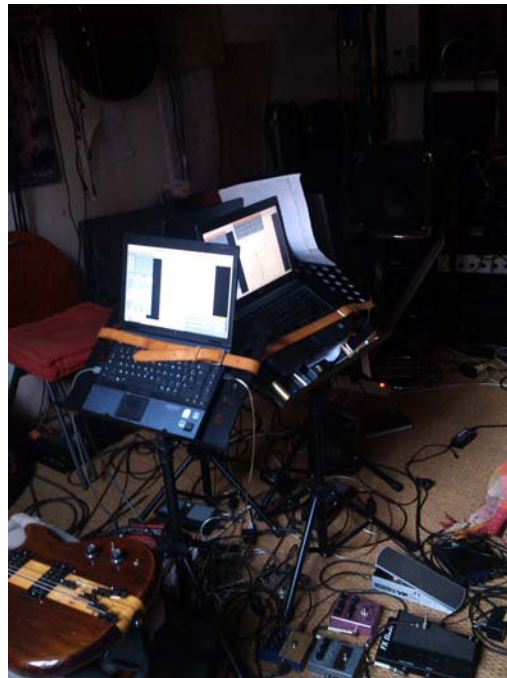
Les Guitares Volantes original setting, as an electric strings quartet, we use 4 independent trajectories generators Orfeusz 206 driven by 4 laptop computer (with Windows XP or 7) -a controller program-, and 4 MIDI pedal to control the speed of our each trajectories.

On different paths. In my recording studio, I have a mixing console 24 input + 8 x 23 outputs (the Mackie TT24) giving the possibility to listen easily the 14 output: the surround octophonic box shape + the hexaphonic cabinet in the middle of the space/place, on a barstool!

Besides, with the 7 hexaphonic audio trajectories generators, it can shape an orchestra of 7 and 14 musicians having their sounds dancing by flying in three-dimensional space. To do that: we need a digital mixing console with $7 \times 6 = 42$ input, which is not impossible. To control any mix between different trajectories, like being for example 3 in the same path then progressively separated in different paths, we need in this case: additional 14 auxiliaries and 14 additional input in the mixing console, and still, it is not impossible: 56 input. But this spatial electric orchestra I wish since 1979 ask too much organisation to exist. I tried. 1rst: *the workshop is essential to help electric musicians to fly their sounds.*



The hexaphonic cabinet on a barstool



The 4 laptop on music stand with the Orfeusz program

Better to work of course *with 4 trajectories generators* for the workshop, with Laurent and I to spend pleasant time with 4 to 8 cabled guitars and keyboards at the same time.

The polyphony started in the 14th century with 4 voices. The polytrajectophony started in 2017 with 4 paths in space with 4 independent trajectories by their shapes, their speeds and their directions flying in *real time* in our *real three-dimensional space*, at the same time.

Why to organize the Flying Guitars workshop 1rst in NY in the US?

1rst, because there is in NY the only sympathetic electric guitar performer I know who understand the goal of the music we play, and who does not break the fragile link between inventive musicians to stay alone in an isolation believing the others are hostile!

2d, I would like to live few days in NY. The lost capital of the Western civilisation.

I am 61 in 2022, and my death is coming closer :)

Also, we know how it works coming "to work in the US"! It is clear that we need an official invitation otherwise Laurent and I will never pass the custom with our musical instrument!

You can think:

Why not inviting musicians in Toulouse, or else where in France or Europe? As I told you, a strong hostile jealousy reign around original music in Europe with people thinking only to destroy what original artists are building + the 41 years old political hostility against original art and music closed everything. Check Les Guitares Volantes 5 years history, you will understand what I mean: <http://centrebombe.org/livre/guitares.volantes.html> The number of refusals is impressive! We know that in NY is not the ideal context too for original music development. NY lost its title of capital of art in the 90s. Nothing is easy to spend pleasant time among friends musicians!

Conclusion? Or introduction?

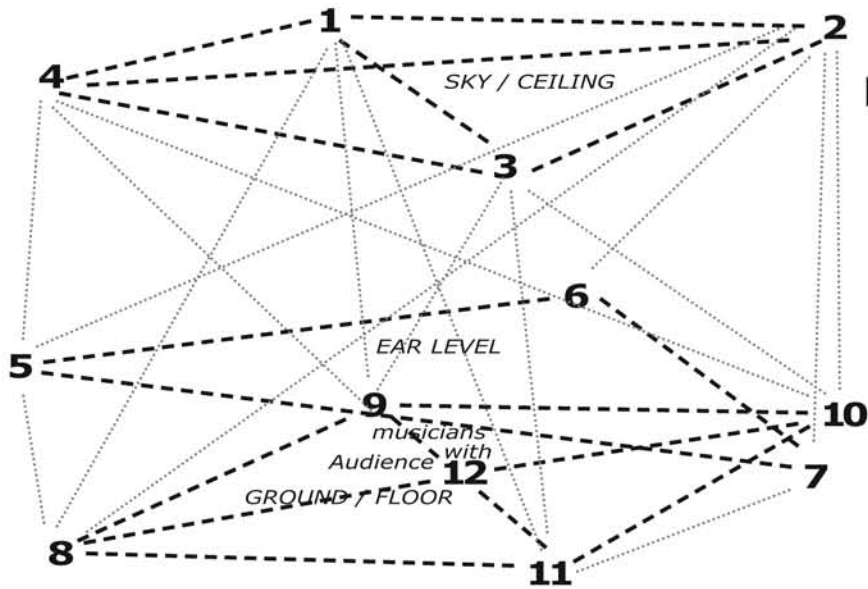
Spatial instrumental music is the natural and logical evolution of electric music started with electric guitar and electric keyboard: the relocation of the sound source with a cable. Spatial electric music only multiply the number of cable and loudspeakers to play hide and sick in three-dimensional space with trajectories. I discover the fun adding a volume pedal to enhance the music game. And am I sure you understand the consequences of spatial electric instrumental music on human beings and the music it will emerge after what we initiated to exist? I never gave up since 1979! Our spatialisators are only the beginning of what it is possible to perform with our electric instruments and theirs sounds flying dancing in space.

Cheers! Santé!

Mathius Shadow-Sky

Yes! a luminous shadow flying in the sky

phone in France 33/ 7 83 07 84 21



LES GUITARES VOLANTES

**mix schematic
dynamic routing
28x12 + 4 aux**

12 similar loudspeakers forming 12 asymmetric angles polyhedron.

**12 output to the
dodecahonic polyhedron:**

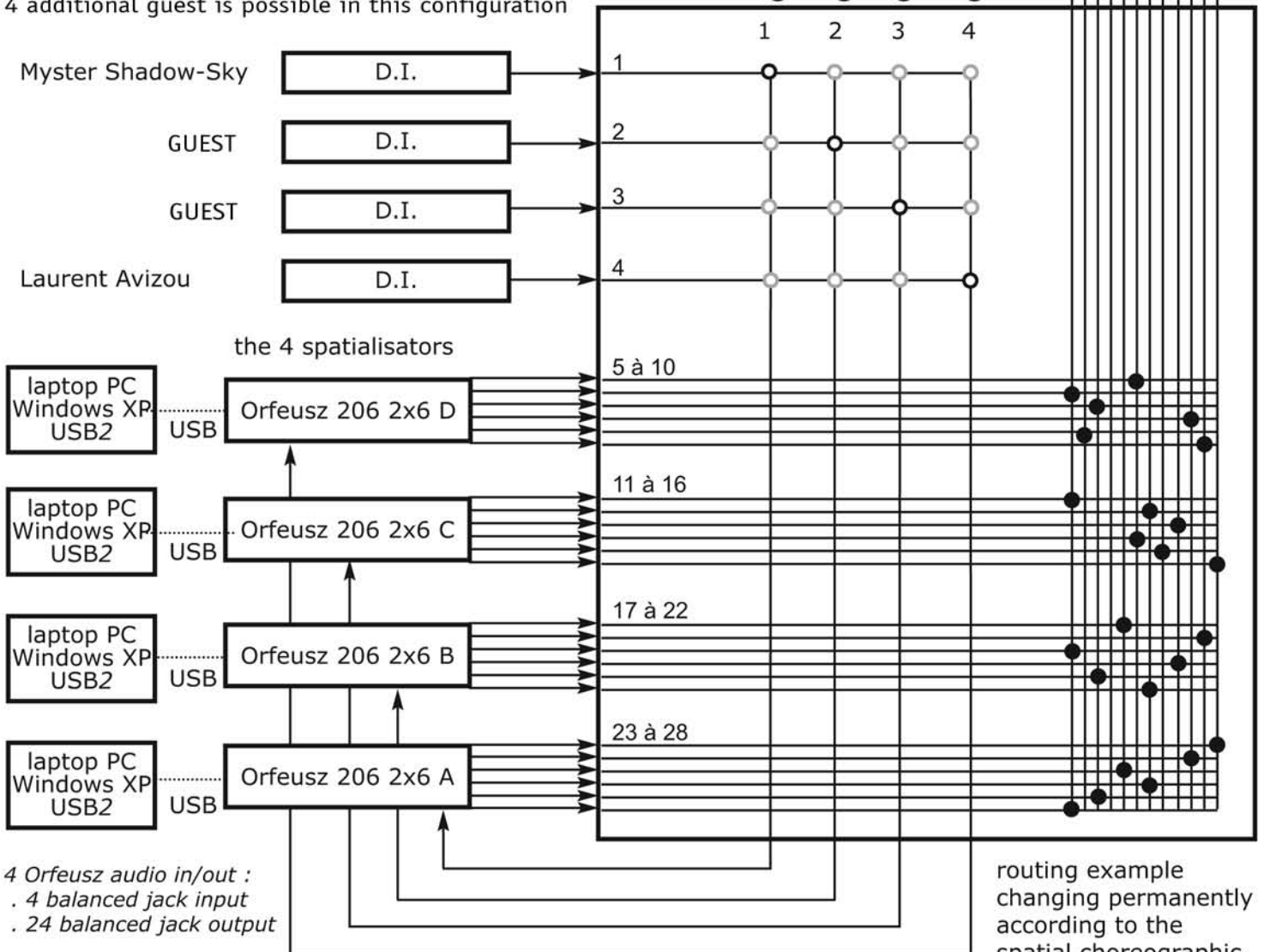
We use auxiliaries to mix inputs paths between the 4 spatialisators Orfeusz 206. That allow to mix 1 2 3 4 paths and transform 1 2 3 4 path(s) in another(s), etc.

*aux. send
auxiliaries 1 - 4*

Orfeusz 206 A
Orfeusz 206 B
Orfeusz 206 C
Orfeusz 206 D

1.2.3.4.5.6.7.8.9.10.11.12

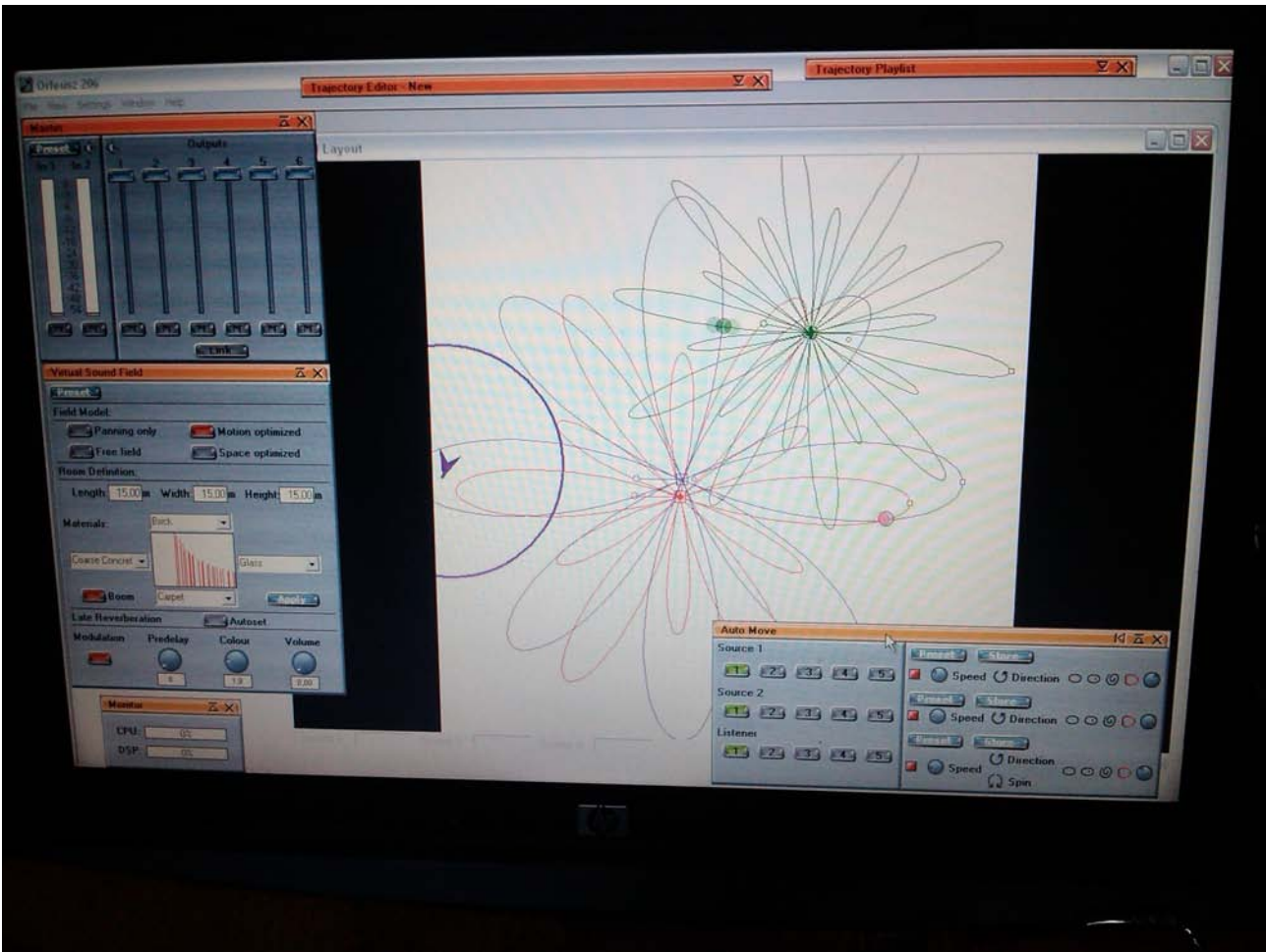
+ 4 additional guest is possible in this configuration



4 Orfeusz audio in/out :
. 4 balanced jack input
. 24 balanced jack output

1 MIDI pedal per computer (= 4) controls the speed of the trajectories

routing example
changing permanently
according to the
spatial choreographic
of the music.



How looks like the Orfeusz 206 program to control sound trajectories in space

