INFINITE PENDULUMS

by Virgile Abela

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DESCRIPTION
INFINITE PENDULUMS is a kinetic, sound and light installation that resonates with gravity. In the acoustic imprint of the exhibition space, four large pendulums, one microphone, two subwoofers and twelve projectors – the installation's performing instruments – cyclically (re)interpret a 30-minute sound, kinetic and light composition in three parts, following a Night – Day – Twilight cycle.

INSTALLATION
Subjected to gravity, the pendulums appear to us as strange robotic creatures, addressing our physical bodies. Their hypnotic behaviour invites us to explore the paradoxes of the finite and the infinite, as well as the wave-particle duality, playing with the audience's retinal persistence. It is in these interstices that the work finds its poetic and vibratory language.

PROCESS
The writing is based on a modular ecosystem that correlates the kinetic data of the pendulums on three planes over time, alongside a real-time analysis of the audio feedback between a microphone positioned in the centre of the room and the speakers arranged within the moving spheres. This data is then routed into sound and light modulation inputs at various levels. These correlations generate evolving landscapes, giving the installation a certain freedom to interpret its own score.

SPACE(S)
This installation cannot be replicated exactly from one venue to another. It adapts to the volume, acoustics, contours and materials of each venue’s architecture. This is why each new presentation partly reinterprets the work, through a specific in situ approach.

EXPERIENCE
The audience moves freely through a cycling work that has no beginning or end. Shadow play, light diffraction and moving sound spatialisation constantly redraw the contours of the space in which bodies move.

Pic @ Christophe Jeanne

CREATION 2025

Virgile Abela >
Artistic direction, composition, programming

Arié van Egmond > lighting

Patrick Sanchez > electronics
Etienne Gourc > robotics and modelling
Jean-Marc Corneloup > digital machining

Valentine Guillien, Sylvain Gorget > construction
Vincent Long, Sébastien Wierinck > 3D printing

Scientific support >
MAS LMA-ECM-CNRS-AMU Platform, Marseille

Technical support >
Collectif Manœuvre, Caen

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>>> VIDEO & PHOTOS

Executive production >
Station MIR, Caen

Co-production >
GMEM, Marseille
Un Singe en Hiver, Dijon
Maison de la tour, Valaurie
Euphonia, Marseille

Financial support >
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SCAN (fund supporting digital arts creation) DRAC Auvergne Rhône-Alpes
DRAC Bourgogne Franche-Comté
SACEM (creation grant)

With the collaboration of Oblique/s

Creative residencies >
[Marseille] Mechanics and Acoustics Laboratory - CNRS, GMEM-cncm, CAP15
[Dijon] Un Singe en Hiver, [Caen] ESAM

Premiere at the]Interstice[1000 festival, December 2025, Caen

Propagations Festival, GMEM-cncm, May 2026, Marseille

PRESS

Article by Dominique Moulon, revue TK21
‘The laws of physics, including gravity, play a major role in the creation of music generated in real time by this immersive instrument. So much so that the experiences of listeners can be described as unique, since they are never repeated in exactly the same way…’

Cave Caenem _ Caen cultural news
‘The power of the installation takes a little getting used to, as the movement of the pendulums is slow and subtle to observe at first, but the grandiose finale is a magnificent offering…’

Sparse Magazine by Killian Cestari
‘…It's easy to be captivated by this harmonious and hypnotic ensemble’

Ouest France, by Laurent Neuveu
‘Highly conceptual but mesmerising…’

SPECIFIC SCENOGRAPHY FOR EACH SPACE

LIGHTING

The lighting settings involve using the walls and floor of the space as surfaces for projecting the shadows of the pendulums. They require specific adjustments for each space.

Discreet installation of automatic projectors on mounting brackets.

Pic @ Jeanne Dubois Pacquet

SOUND

Acoustic adaptation to the resonance frequency of the room.

Subwoofers placed on the floor, clean cable runs from the control room to each device.

Microphone suspended from the ceiling in the centre of the room.

DISTANCES BETWEEN THE PENDULUMS

The pendulums are spaced around 4 meters apart.

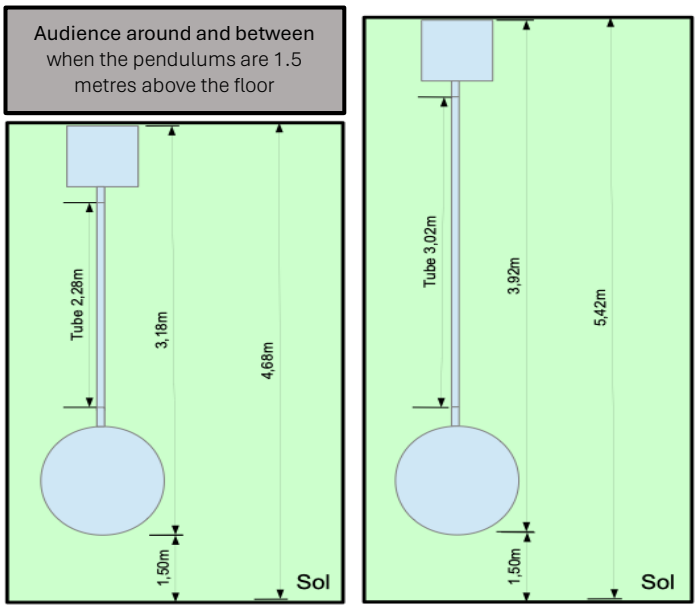
Their hanging height determines the scenographic design of the work.

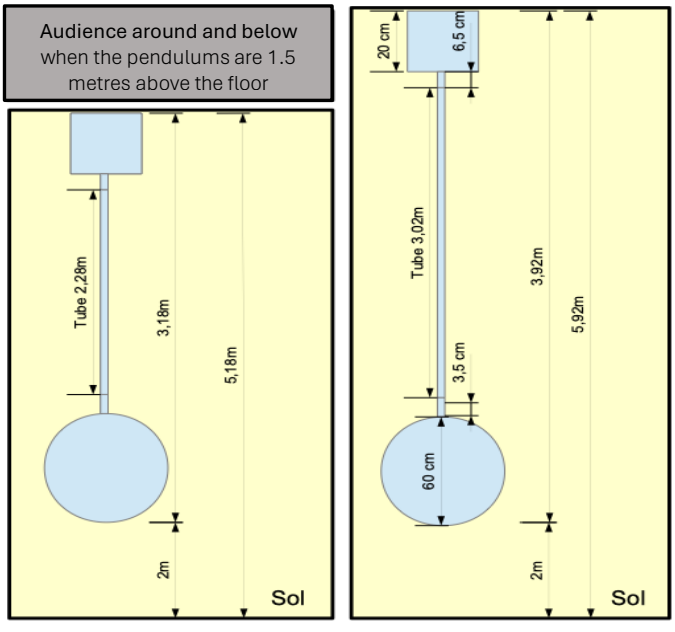
It must be considered in relation to the proportions of the space and adapted to its height, either 2 meters above the ground to allow the public to pass underneath, or 1.5 metres above the ground, with the public circulating around it.

PENDULUM HEIGHTS

2 pendulum heights available: 3.28 m or 3.92 m
1 hanging box: H26.50 x W30 x D27 cm
1 sphere: 60 cm diameter
1 tube, 2 sizes available: 228.50 or 305.50 cm

Depending on the scenographic objective of the work, the heights of the pendulums can be adapted to that of the room, and are available on request 2 months in advance for their manufacture + €500.





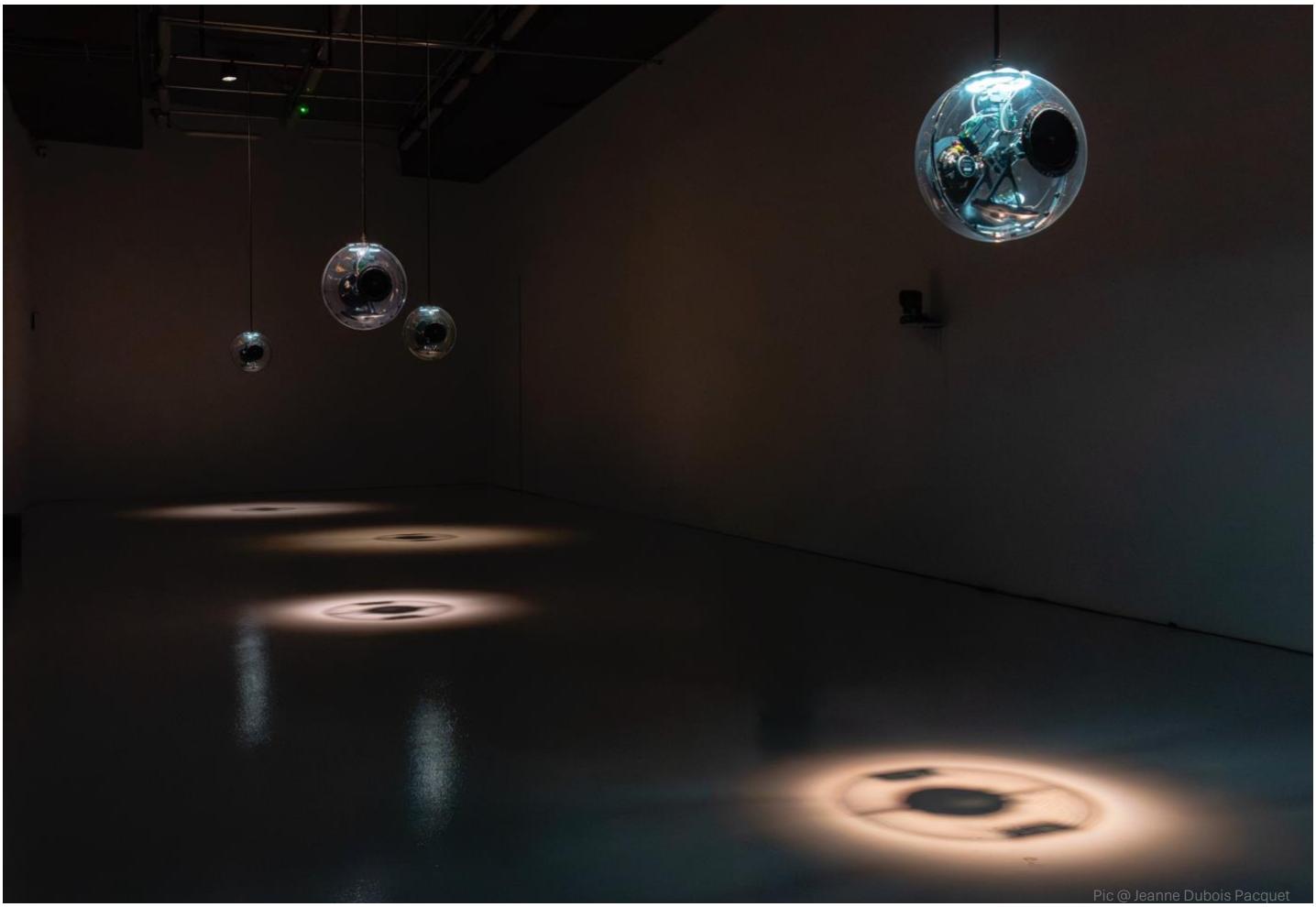
TECH RIDER

INSTALLATION

4 light pendulums
4 shower lights
4 moving heads lights
1 stroboscope
16A consumption
1 hanging microphone
2 floor subwoofers
1 ceiling router
1 hidden control room
Floor and ceiling cables

TYPE OFF SPACES

Dark room or covered outdoor night show
Height between 4 and 6 meters
Minimum surface area of 80m^2
Square, rectangular or circular space
Work sensitive to waves, room without Wi-Fi or mobile



TECHNICAL REQUIREMENTS FOR THE ORGANISER

- Hanging surface ready before assembly
- Genie-type lift or scaffolding
- Large stepladder for working at 2m
- Tools available
- 1 table, 2 chairs
- 1 22" HDMI screen
- Spear of XLR, DMX and electrical cables

EQUIPMENT PROVIDED BY THE ARTIST

- 4 light pendulums + tubes + hooks
- 2 subs, 1 microphone, 2 preamps, 1 4-ch amplifier
- 1 Mac mini, 1 Enttec USB Pro, 1 sound card
- 4 LED pars, 4 autos + wall mounts
- XLR, DMX, electrical and Ethernet cables
- Router
- Tools

SETUP / TEARDOWN

The artist + lighting technician + 2 technicians:

- D-5 Arrival of the artist and equipment, unloading and storage on site, hanging surface ready.
- D-4 Installation of pendulums and wiring of the entire system > 1 day with 2 technicians
- D-3 Kinetic and sound adjustments and lighting installation > 1 day
- D-2 & 1 Lighting adjustments with the artist and Arié van Egmond (lighting technician) > 1 day
- D-D Timing programming, cleaning of the space and opening to the public in the evening
- Dismantling ½ day

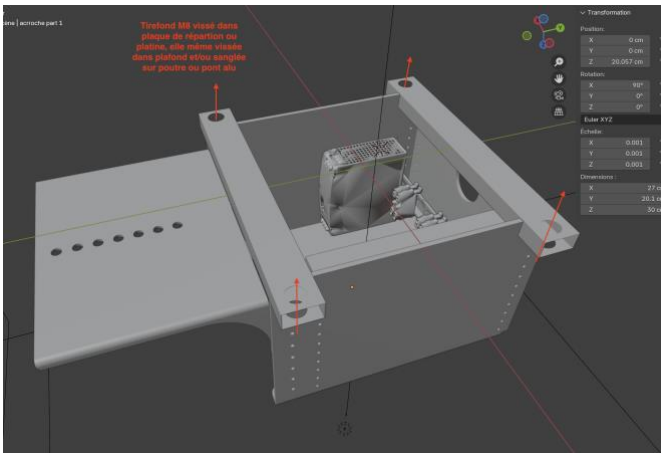
Pic @ Christophe Jeanne

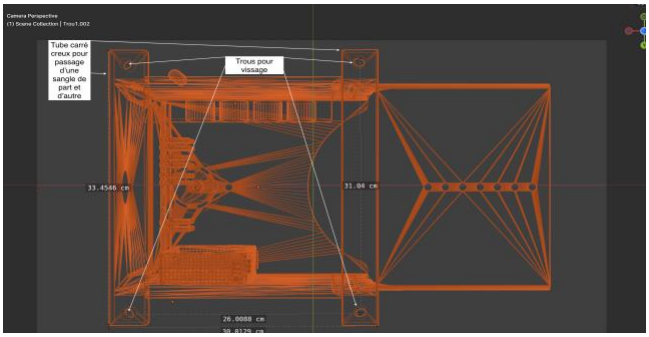
PENDULUM MOUNTS

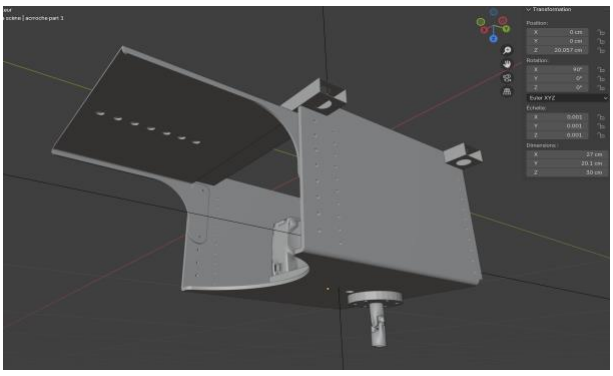
Attached to the frame on a fixed surface
Fastened by screws and/or straps to a 22 cm CP distribution plate anchored to the ceiling, or strapped to a beam

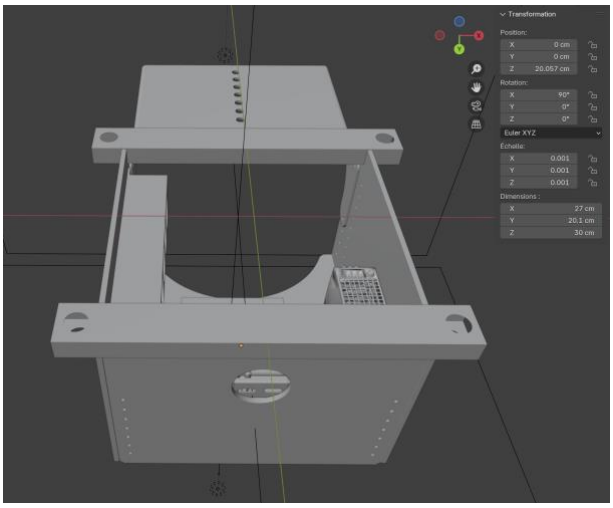
INSTALLATION TECHNICS

1. Attaching the hanging box to the ceiling
2. Attaching the tube to the sphere on the floor
3. Attaching the tube + sphere to the hook
4. Attaching the pars to the hook
5. Attaching the strobe, microphone and router
6. Lighting and sound cabling
7. Installing the control room
8. Installing the subs on the floor
9. Installing the moving head lights at 2 metres above the floor on shelves





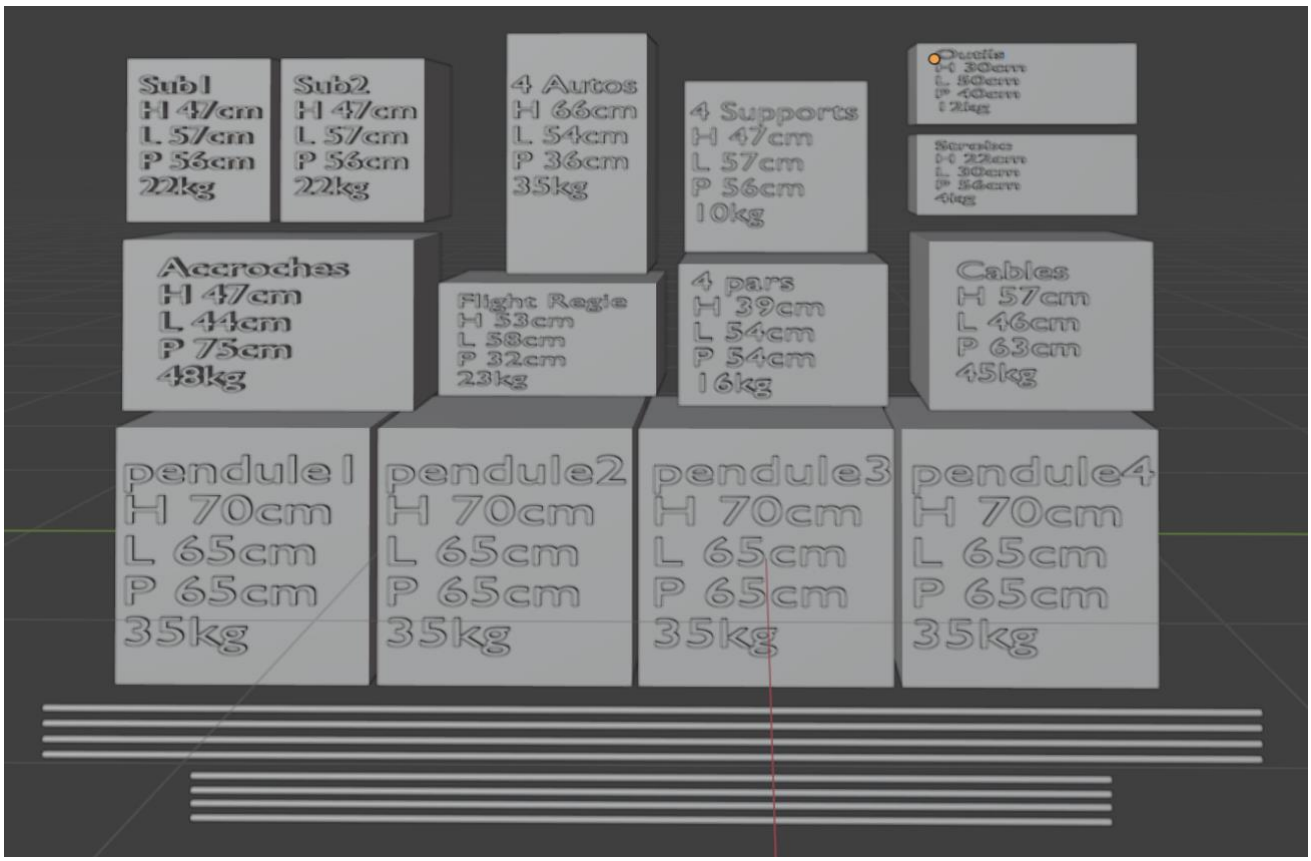


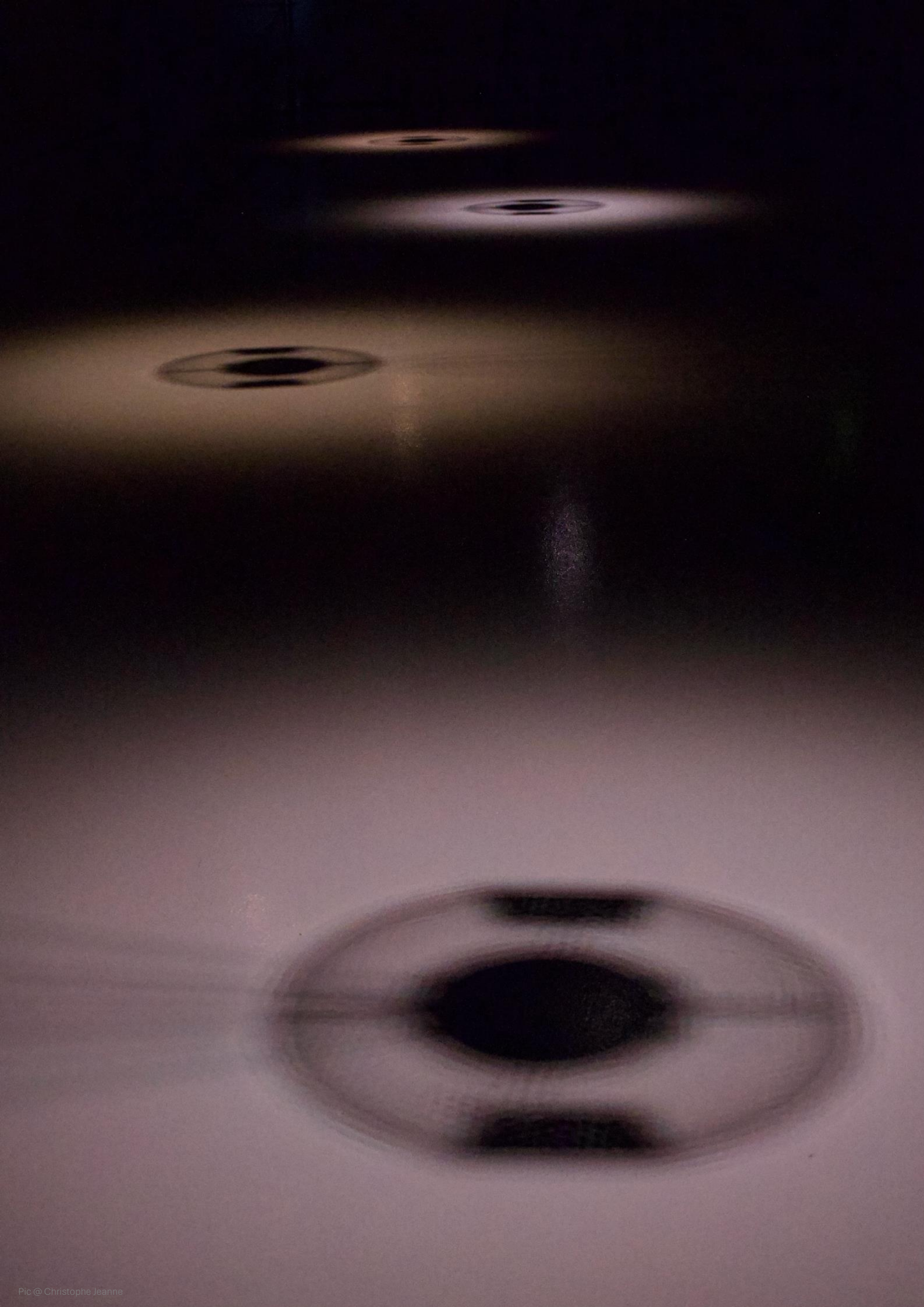


TRANSPORT

Either by van with the artist
Or by courier and the artist travelling by train or plane

1	COLISAGE	Hauteur/cm	Largeur/cm	Profondeur/cm	Cubage/m3	Poids/kg
2	Subwoofer 1	47	57	56	0,150024	22
3	Subwoofer 2	47	57	56	0,150024	22
4	Tools box	50	30	40	0,06	12
5	Box Strobe	22	30	56	0,03696	4
6	Box Accroches	47	44	75	0,1551	48
7	Box 4 pars	39	54	54	0,113724	16
8	Box supports	47	57	56	0,150024	10
9	Flightcase Autos	66	54	36	0,128304	35
10	Flightcase Régie	53	58	32	0,098368	23
11	Flightcase cables	57	46	63	0,165186	45
12	Flightcases pendules 1	70	65	65	0,29575	35
13	Flightcases pendules 2	70	65	65	0,29575	35
14	Flightcases pendules 3	70	65	65	0,29575	35
15	Flightcases pendules 4	70	65	65	0,29575	35
16	Grand tube pendules 1	302	2	2	0,001208	3
17	Grand tube pendules 2	302	2	2	0,001208	3
18	Grand tube pendules 3	302	2	2	0,001208	3
19	Grand tube pendules 4	302	2	2	0,001208	3
20	Petit tube pendules 1	228	2	2	0,000912	2
21	Petit tube pendules 2	228	2	2	0,000912	2
22	Petit tube pendules 3	228	2	2	0,000912	2
23	Petit tube pendules 4	228	2	2	0,000912	2
24	TOTAL	2875	763	800	2,399194	397





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