

**“COSMIC MICROWAVE BACKGROUND”**  
AUDIO VISUAL DANCE PERFORMANCE





# CONCEPT



*"We are fundamentally made of space itself, most likely from the origin of consciousness, due to the fact that we are each a functional unit of a means of processing information, which is the connecting fabric of the Universe"*



# AUDIO VISUAL DANCE PERFORMANCE:

Cosmic Microwave Background (CMB) is an interactive audiovisual performance. A metaphor that begins at the starting point of the creation of the universe, which uses, as an argument, the Nobel Prize-winning theory that found a form of electromagnetic radiation that fills the entire Universe.

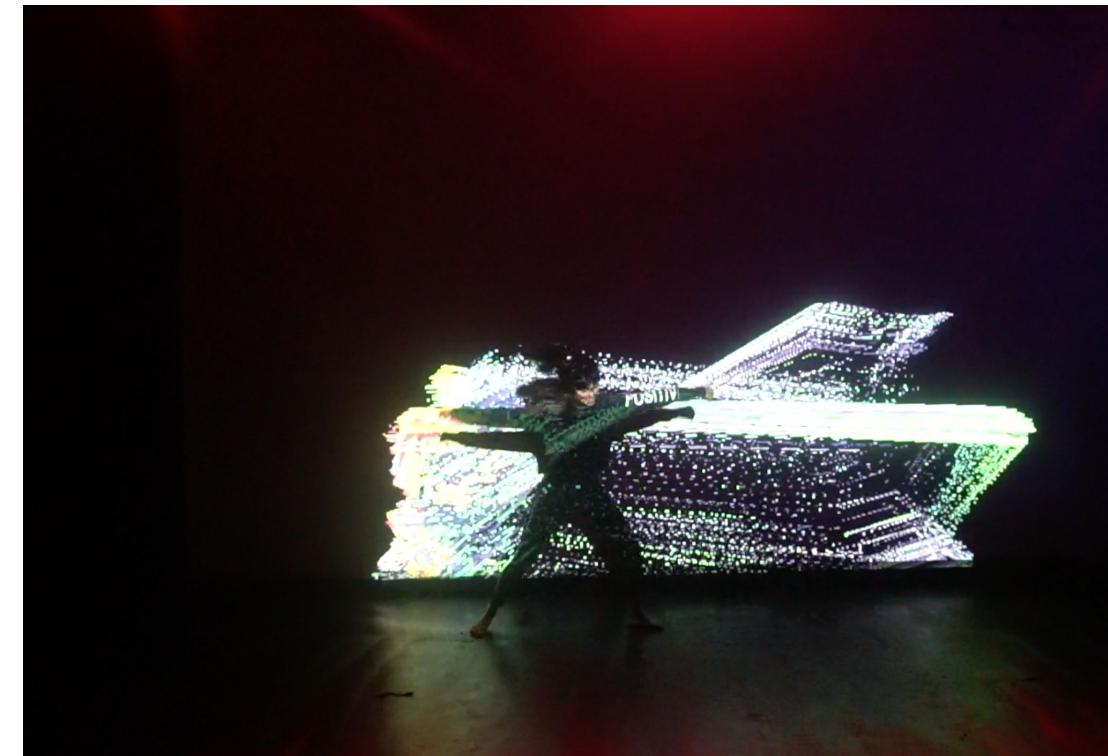
CMB is produced by the continuous echo of the first photons that escaped the Big Bang. Its discovery is one of the most conclusive theories of the origin and expansion of the universe. Today we can hear and see it, every time we turn on any device that generates an image or sound and that crosses the threshold between the understandable and the GLITCH.

The piece is constructed in 8 scenes represented in paintings composed of creative code, interactive design, lighting design, sound design, visual design, stage design and scenic body design.

The interactive visual environments act as another performer or body of this piece. Each virtual scenario is created in real time from the information provided by a motion sensor, which uses the avatars of the performers and audio reactivity to translate it into images and generative sound, creating an interactive synesthetic atmosphere that integrates and unites the senses in an absolutely immersive presentation.

## COSMIC MICROWAVE BACKGROUND

AUDIO VISUAL DANCE PERFORMANCE





## CONCEPT:

Nobody really knows how or why, but Nothing moved itself, generating a vibration that filled up every corner of space. That vibration was the first thing that happened and filled everything up completely, to the point that its echo still resonates in everything today.

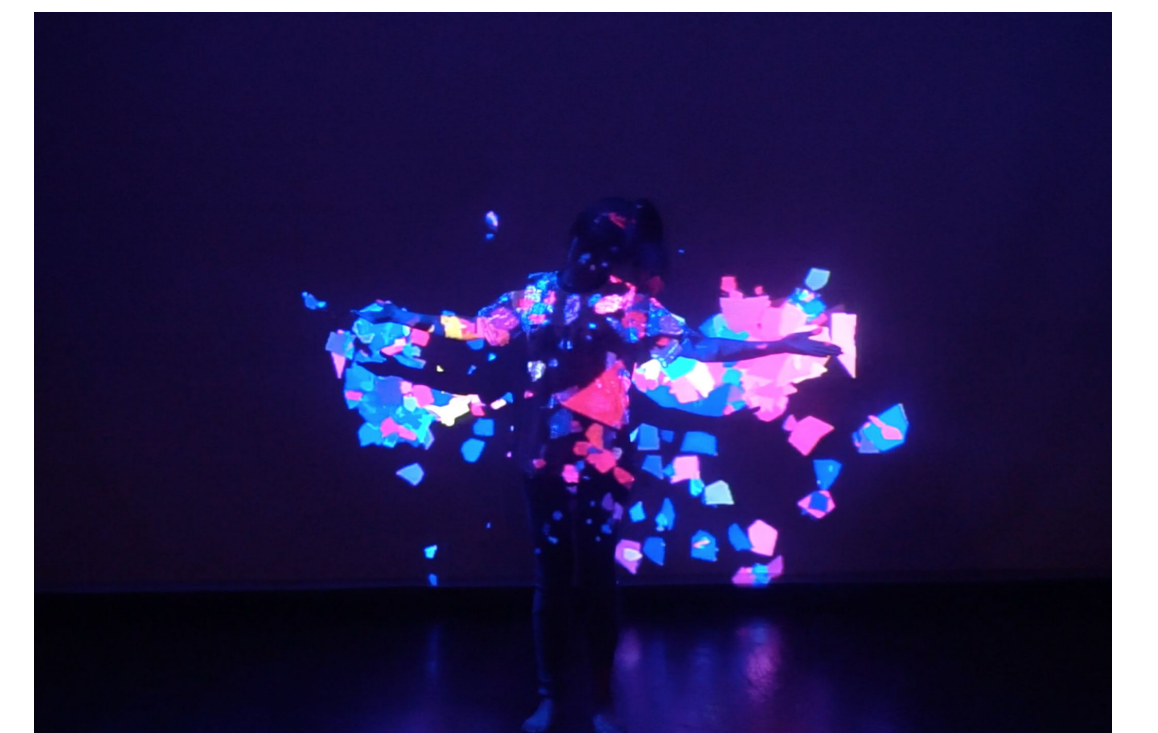
OM the primordial sound, collided with itself and raised its vibration, so much so that it caused the light to be reflected throughout space, again and again, this moment was when the first shapes began to emerge.

**"It all started with a vibration, with a flash of pure energy, with a sound that generated the Big Bang, the creation of the universe"**

Everything that surrounds us is in constant vibration. The oscillation of an object between one position and another works constantly. All movement is energy, all vibration is energy.

## COSMIC MICROWAVE BACKGROUND

AUDIO VISUAL DANCE PERFORMANCE





# COSMIC MICROWAVE BACKGROUND

AUDIO VISUAL DANCE PERFORMANCE

## BODY AND CHOREOGRAPHIC MOVEMENT:

One of the ways of representing the origin of the universe, is from our body, as living beings, as humans and as a consequence of this first collision of particles.

We investigate the movement from the beginning of everything. It is created from an idea of conception, sun, irradiation, explosion, original center, ovule. Through movement we look for the way to answer the question: **Where does this first impulse come from?**

The bodies in the scene develop an interaction where they collide and generate an error or rather something indecipherable and / or coded. The body of the performer takes on a fundamental role in this journey to trace different digital parameters that react as if there were another body present, generating a sensitive, aesthetic, communicative and playful experience.

The choreographic creation scheme is made from the body of the performer, which when interacting with something generates the error, this same error, is represented in the scene with the visual and sound design.

The bodies are in dialogue with the multimedia space, establishing a constant action and reaction, represented both by the performers and the audiovisuals, leading to compositions where the movement is improvised, without apparent code, and unrepeatable.

## VIRTUAL SCENES:

The digital environments that are visualized, are metaphors or translations to visual codes to try to portray an abstract space, in which there are no limits to express the complexity that exists when the particles interact with each other.

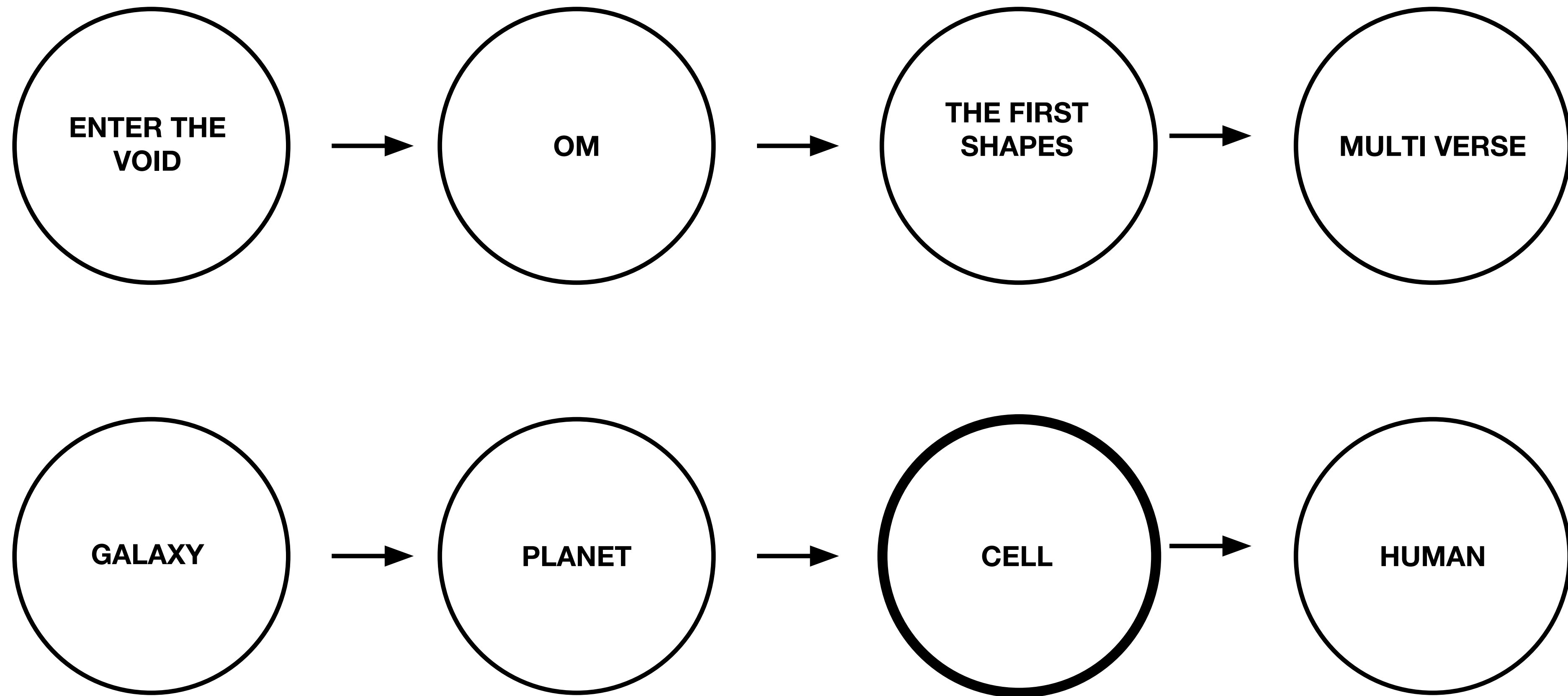
## REAL TIME INTERACTION:

From a motion sensor, the performers are scanned like codes, and translated into image, to generate a constant dialogue in the scenic piece. The representation of the universe is constructed with the theory of particles, generated by the human body giving new possibilities in each series of movements.

## VIEWER:

We conceive this work, as something that the viewer is part of. At the end of this piece we want to allow the possibility for the viewer to participate and interact with the system we have developed, therefore having the opportunity to empathise with the creation of their own version of the origin of each universe.

# Visual Script



"All matter is a vibration in the structure of space-time and the study of the structure of space is called geometry, therefore, music and matter itself are geometry in motion."



# TECH RIDER



# TECHNICAL RIDER

**SOUND REQUIREMENT:**

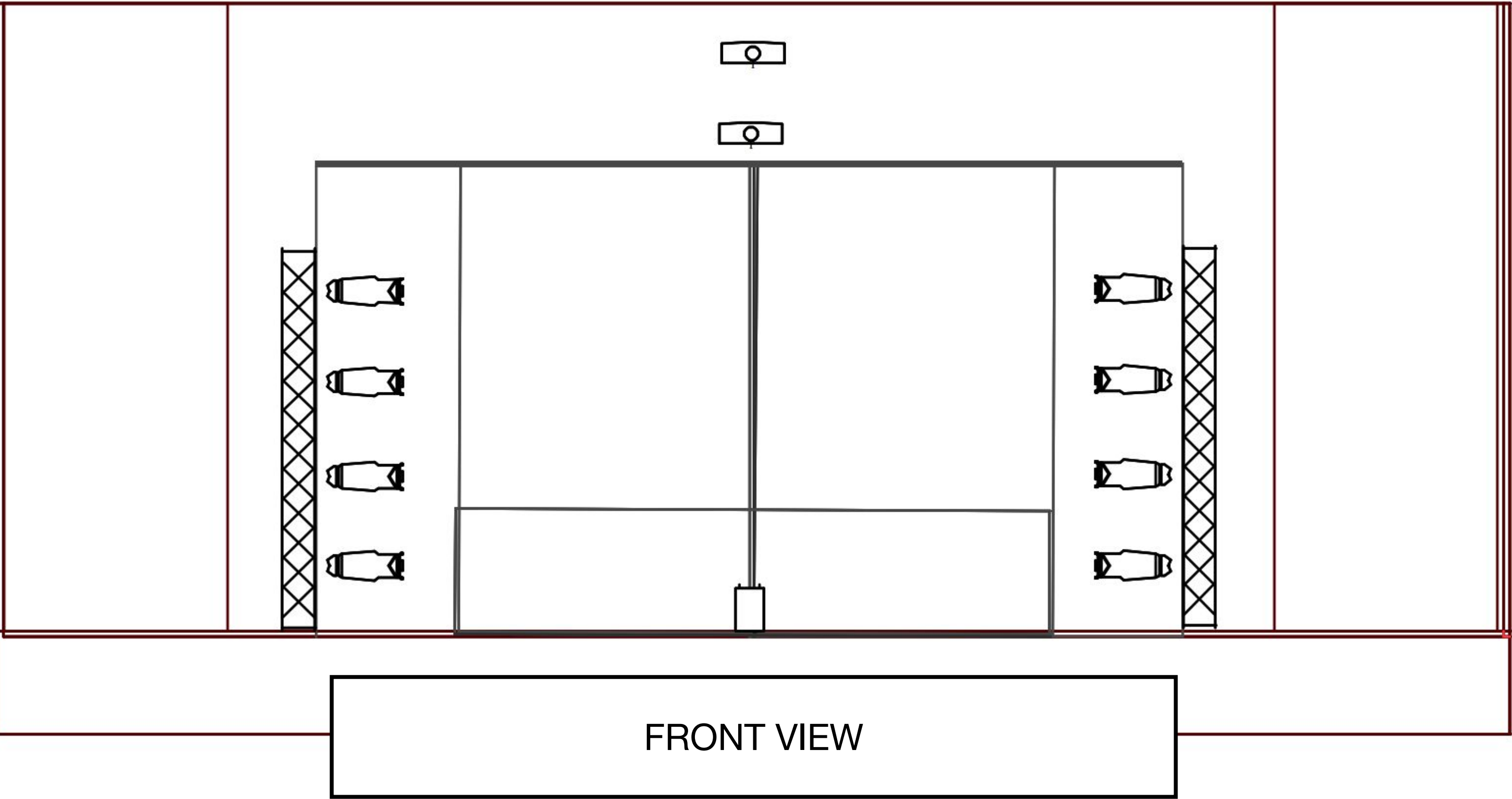
6CH + 2 AUX Send on Console  
L/R Main Output

**LIGHTING DMX512 REQUIREMENT:**

8 ETC Source 4 26°/50° (Ellipsoidal)  
4 RGB Wash Fixtures (Anything)

**PROJECTION REQUIREMENT:**

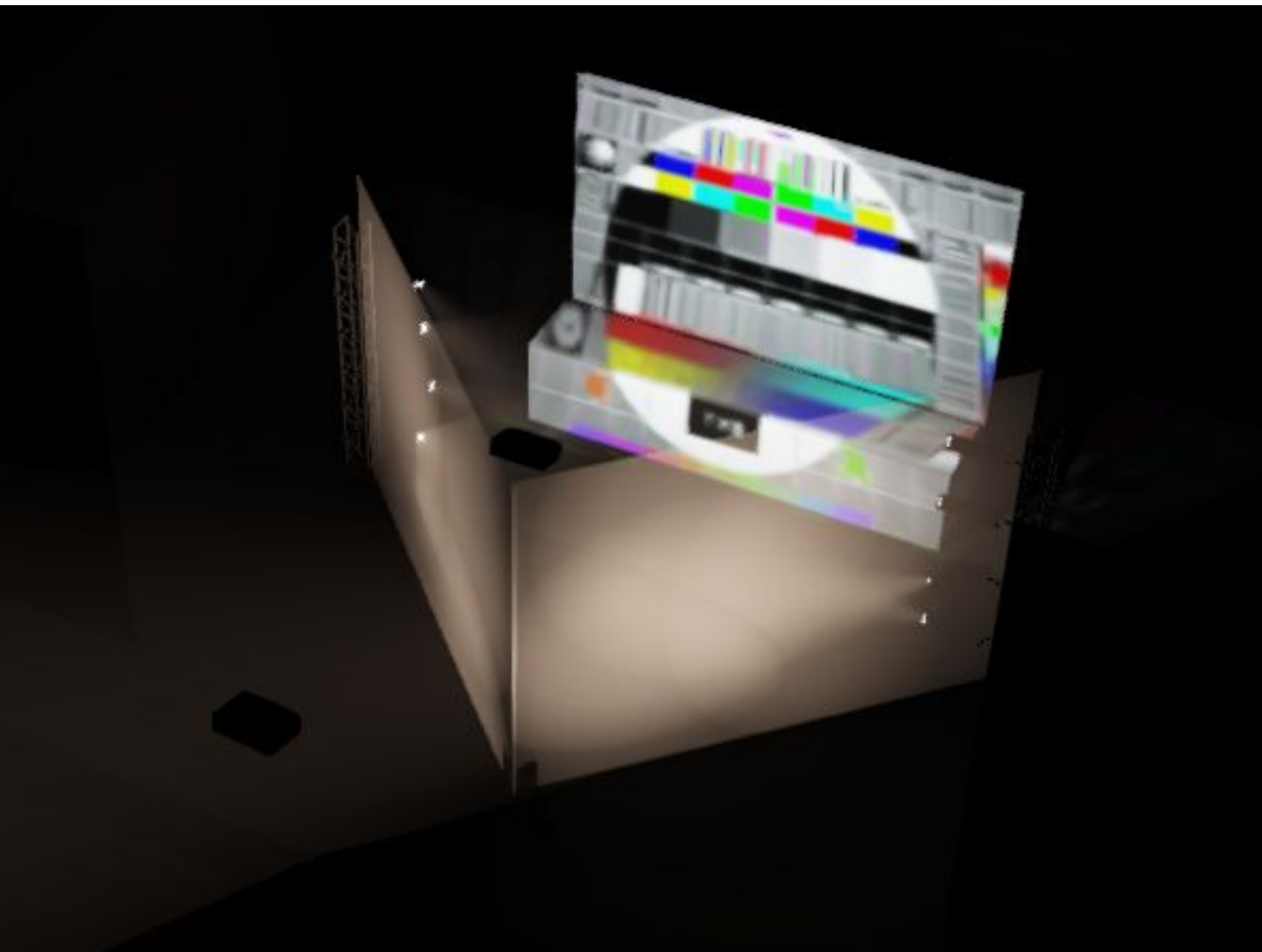
11.000 ANSILUMEN Projector (Rear Proyection)  
0.6~0,9 Lens Throw Ratio  
11.000 ANSILUMEN Projector (Front Projection)  
1.1~1.9 Lens Throw Ratio



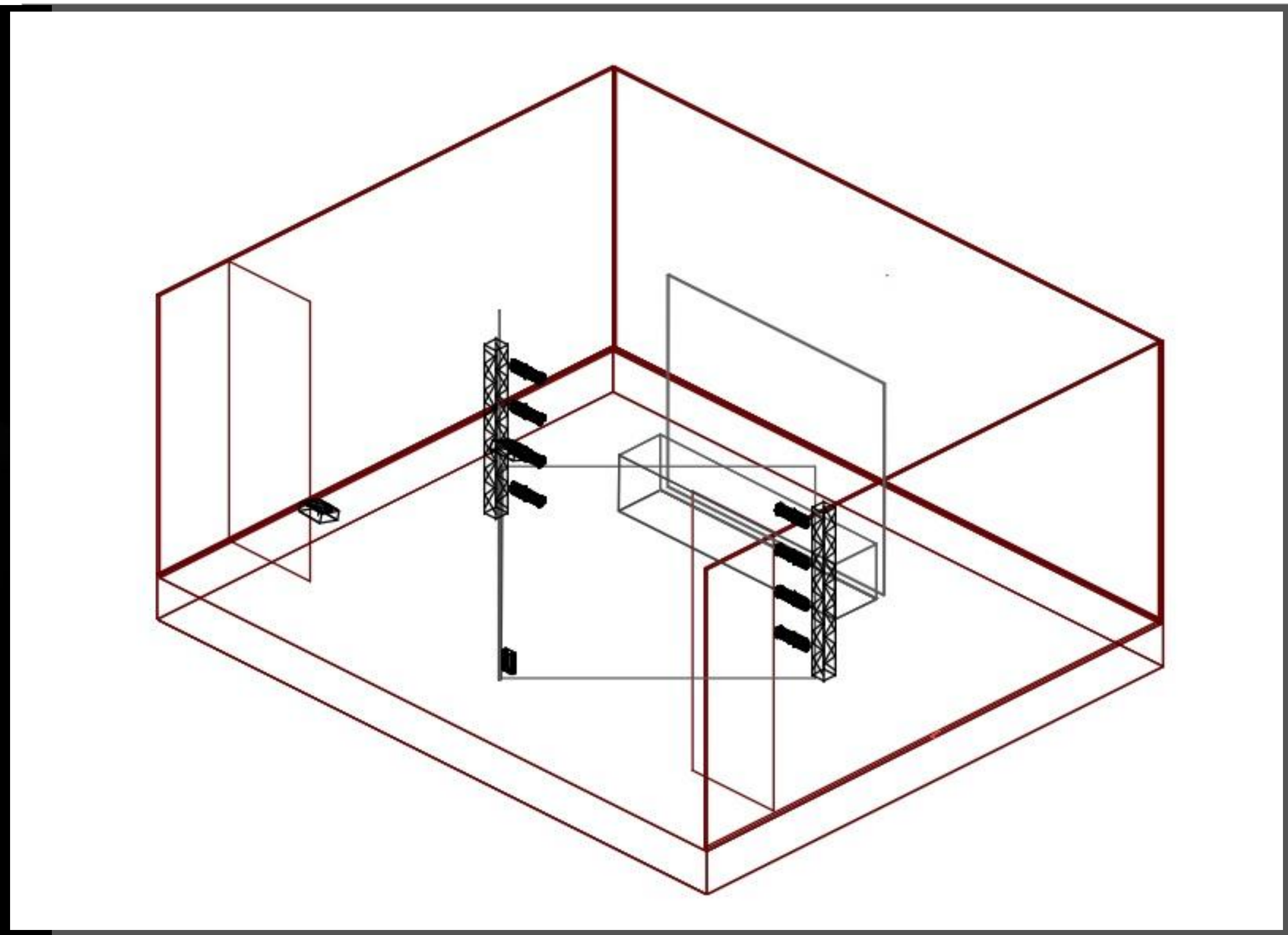
**STAGE REQUIREMENT:**

2x Truss 15' @ 180lb  
1x 19'x13' Aprox. Rear Projection Screen (White / Gray)  
Dark Ambience (Needed for projection)





RENDERED PREVIEW



WIREFRAME PREVIEW



**TEAM**



# BIO



## Joce Esparza

**Dance, Art performer, Maker**

Joce studied Dance at the University of Chile and at the National Arts University of Buenos Aires, Argentina. She has researched new trends in the art of movement such as Flying Low, Contact, Performance and Improvisation, as well as Yoga and Pilates in order to understand the body as a physical, creative and spiritual unit.

Her research has focused on rediscovering the role of women in life, art and dance. Participating in different productions of contemporary dance in Chile and in various art and performance festivals in Chile and Argentina. She was also the protagonist in the performance "Sinestesia" presented in Shanghai, China. She is dedicated to teaching independently and teaches Contemporary Dance, Yoga and Pilates classes, as well as Tangotherapy for the elderly.



# BIO



## **Kurt Rainer Liebsch Díaz**

**Actor, Lighting and stage designer, Visual mapper, and Scenic developer.**

He works as a scenic developer developing technological tools to improve the narrative experience in performing arts. He has designed lighting on theater stages and massive stages, projection mapping and atmospheric sound on stage performances.

He has also worked as an interpreter on different productions, plays and physical theatre performances.



## BIO

### **Andres Luis Glatzel Zuñiga** **Engineer, Software and Hardware Developer**

Graduated from food-science engineering at Universidad de Chile, after 3 years he specialized in software and hardware development for emerging technologies. He is a strong believer that Science, Technology and Arts can combine to infuse creativity and inspiration to the public.

For more than a decade he's been using his knowledge on a lot of diverse fields, such as Laboratory Analysis, Social and Behavioural Studies, Data Capture/Analysis/Vis, Renewable Energies, Interactive Software Developer, VR/AR technology and one or more flying contraptions he created over time.

Currently he is working on projects involving AI Data Analysis, Interactive Software/Hardware Experiences and Augmented Real Time Data Visualization.





# BIO

**Ricardo Tapia Fernández**

**MAKER, LIFE HACKER & LIGHT DESIGNER**

Analyst and researcher of the integration of art with science and technology.

Ricardo works with media arts and innovation, critically incorporating technology in his works of brand experience, creative coding, indie games and interventions in public spaces.

More information at [www.oktopus.tv](http://www.oktopus.tv)





## **WORKS**

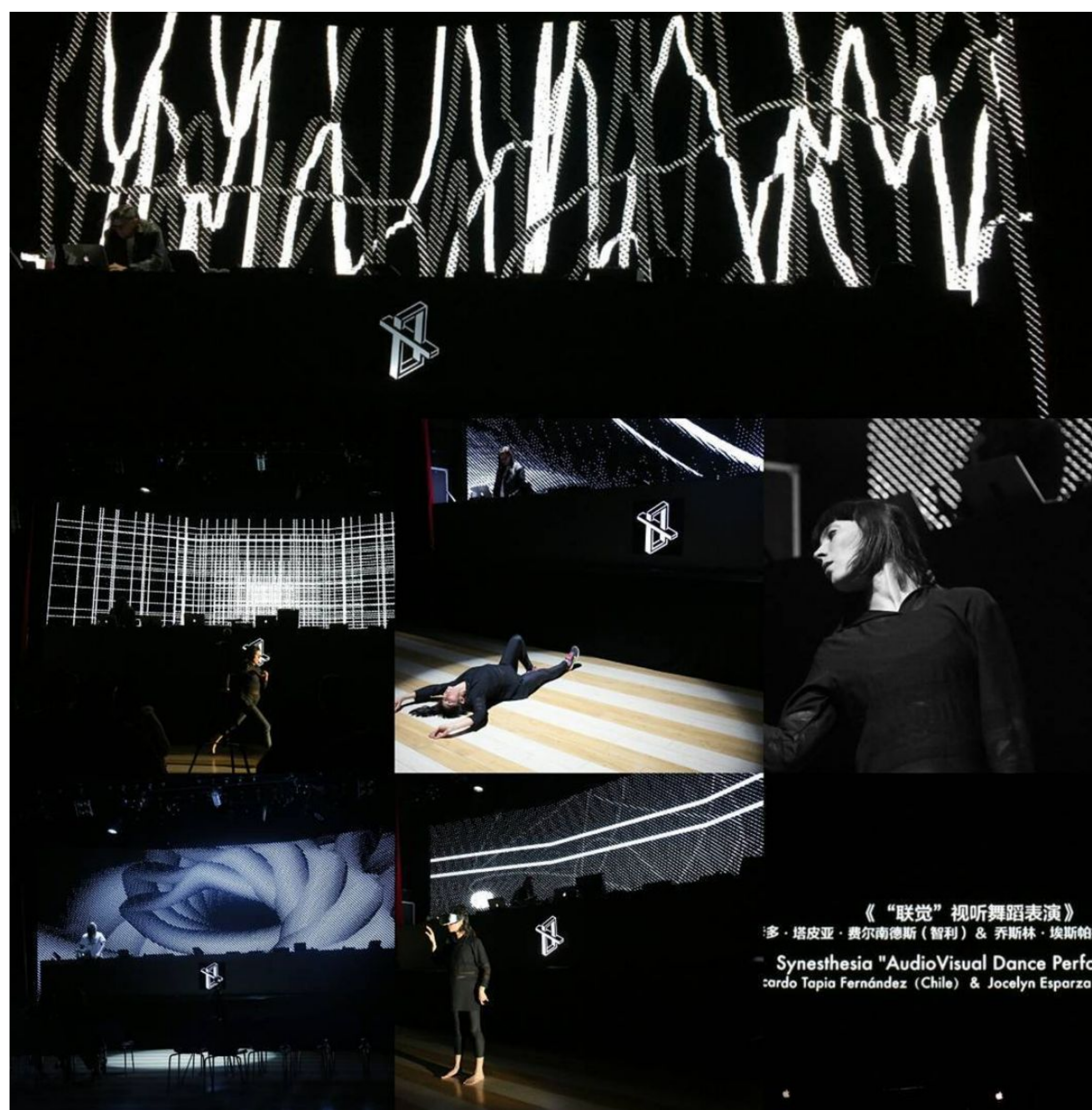
**Below are featured projects from the  
OKTOPUS.TV studio**



# Shanghai China Academy of Art Shanghai Institute of Design.

Invitation to the 20th anniversary of the China Academy of Art Shanghai Institute of Design. Invited to the International Forum of Audiovisual Interaction with new artists and talents from around the world, an A / V series was held on December 7, 2016 at the QSW Culture Center (q.house), with the aim of finding new audiovisual interaction ideas.

The seminar was held on December 8, 2016 and six subjects were discussed: Identity context/The meaning of interaction/Concepts, Narration and Emotions/ Digital and simulation/Material rights and innovation/Yesterday, Today and Tomorrow.



[VIDEO](#)



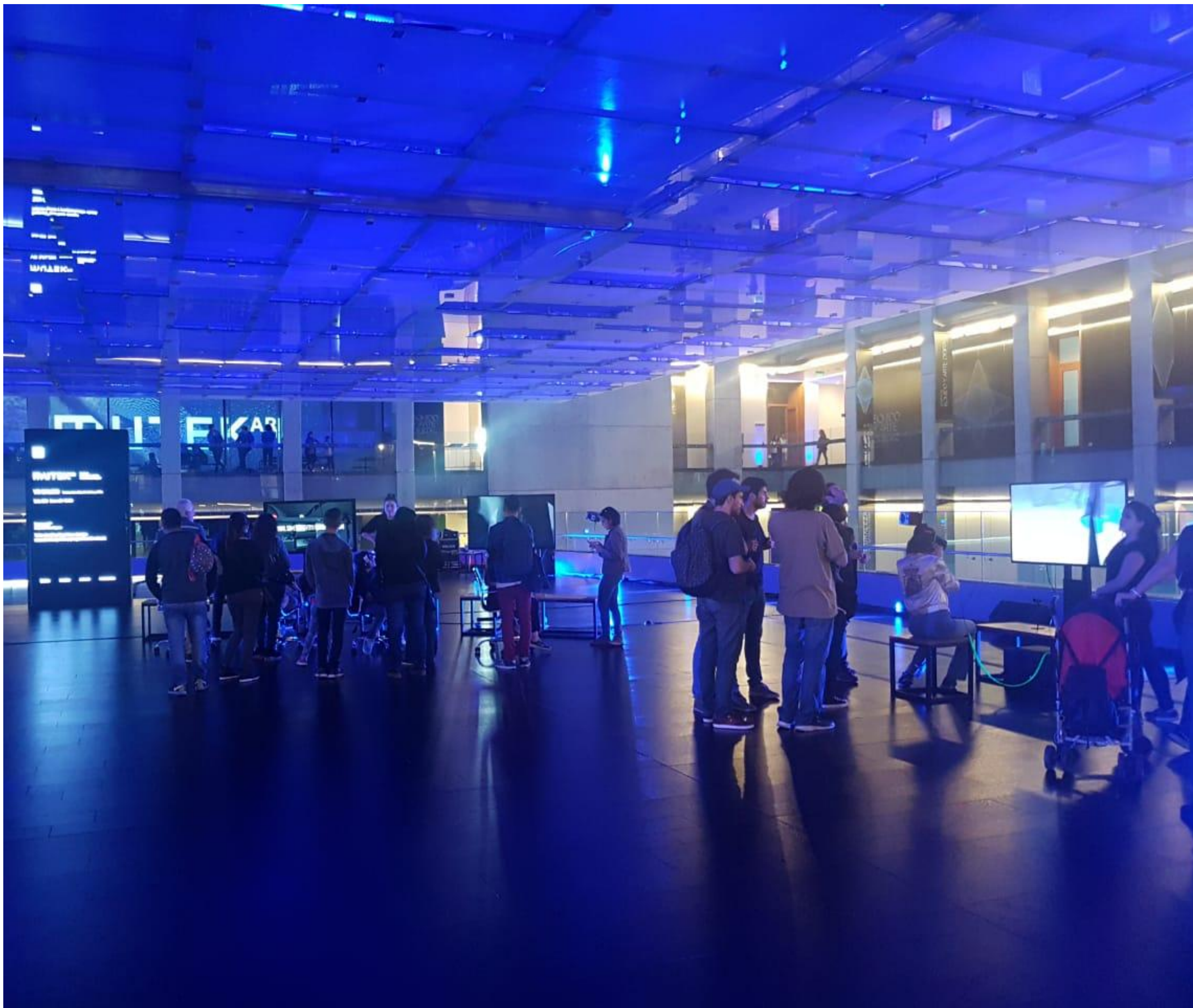


## UNION SONAR +D

**Union** is an interactive avatar in an immersive virtual reality environment that seeks to bring to its users an experience of connection with the present and its inner world. Exhibited at the international festival of digital creativity Sonar + D Santiago de Chile 2016

[+ info](#)





## ALDEN PROJECT MUTEK AR

We have developed a VR experience composed by symbolic images representative of an active and healing beginning to which we want to direct attention. We have a version that exposes the participants to an environment of relaxation aimed at achieving their contemplativeness and tranquility. The name ALDEN PROJECT is based on the Temple of Haldein where according to accurate knowledge, there was a Healing Sanctuary where the Masters of Universal Medicine would assist everyone who came, and heal them under primary color lights. Displayed in MUTEK AR 2017

[www.aldenproject.io](http://www.aldenproject.io)





## MATIAS HERNAN FASHION LIGHT SHOW

Performance, scenography, lights, music and a fashion collection, these are the concepts that H  lene Farnault, author of the book Haute Couture Ateliers, states she must have in a “fashion show”, under this description what the Chilean designer presented was a 360 show in which the light design and visuals were created and provided by OKTOPUS who managed to deliver a concrete and refined visual experience.

[LINK](#)





## KARL LAGERFELD FASHION LIGHT SHOW

We were commissioned to design the lighting, for the catwalk of the Karl Lagerfeld fashion show, for Falabella Chile. For this, we carried out electronic engineering, the manufacture of a relay control system, a series of video animations with rhythmic audio patterns and the programming of 128 dmx channels in 300 led tubes.

[LINK](#)





## ADIDAS NMD INTERACTIVE DISPLAY WINDOW

An interactive system presented in a public space that uses a sensor that activates a camera that cuts off the bottom of the body and adds a glitch effect in real time.

[LINK](#)





[LINK](#)