DISGUISE

CASE STUDY

xR goes medieval for Dubfire's livestreamed DJ set at the Met Cloisters Museum

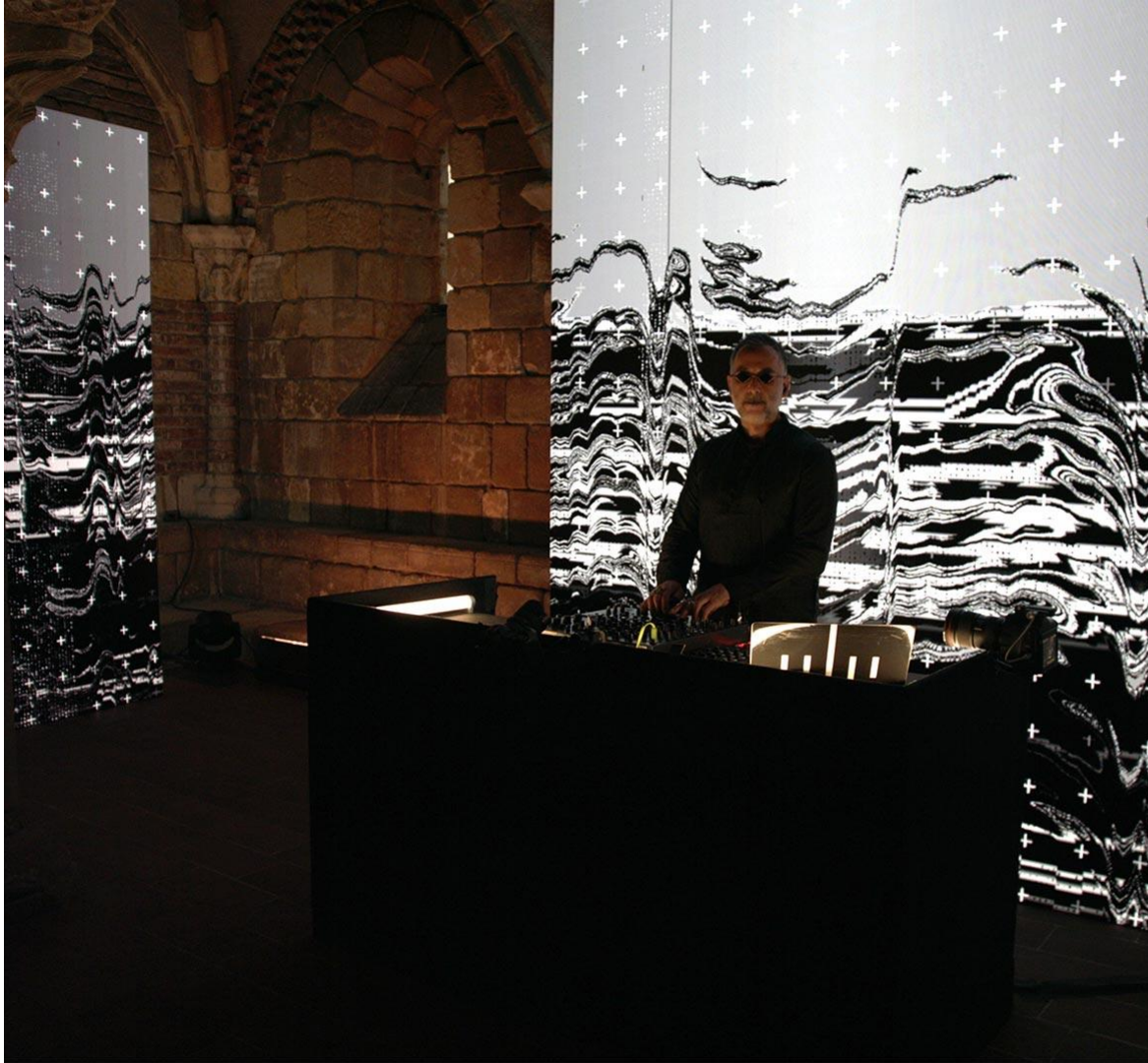
Techno producer Dubfire was invited to play a livestreamed DJ set from the Met Cloisters Museum in New York City, as part of the 2021 Sonic Cloisters virtual electronic music series

At a glance

In this case study, you will discover how Volvox Labs (VVOX) tapped into the Disguise Extended Reality (xR) workflow with Unreal Engine to create a stunning visual experience for Dubfire's performance, marking the first time that the Cloisters had undergone such a digitally-enhanced display of its artwork.

The Sonic Cloisters explore the parallels between electronic music and the art of The Middle Ages, through a series of performances from renowned artists recorded in the unique spaces of The Met Cloisters. During filming, these artists interact with the Cloisters' collection, architecture, and environment to explore new creative territory and compositional approaches.

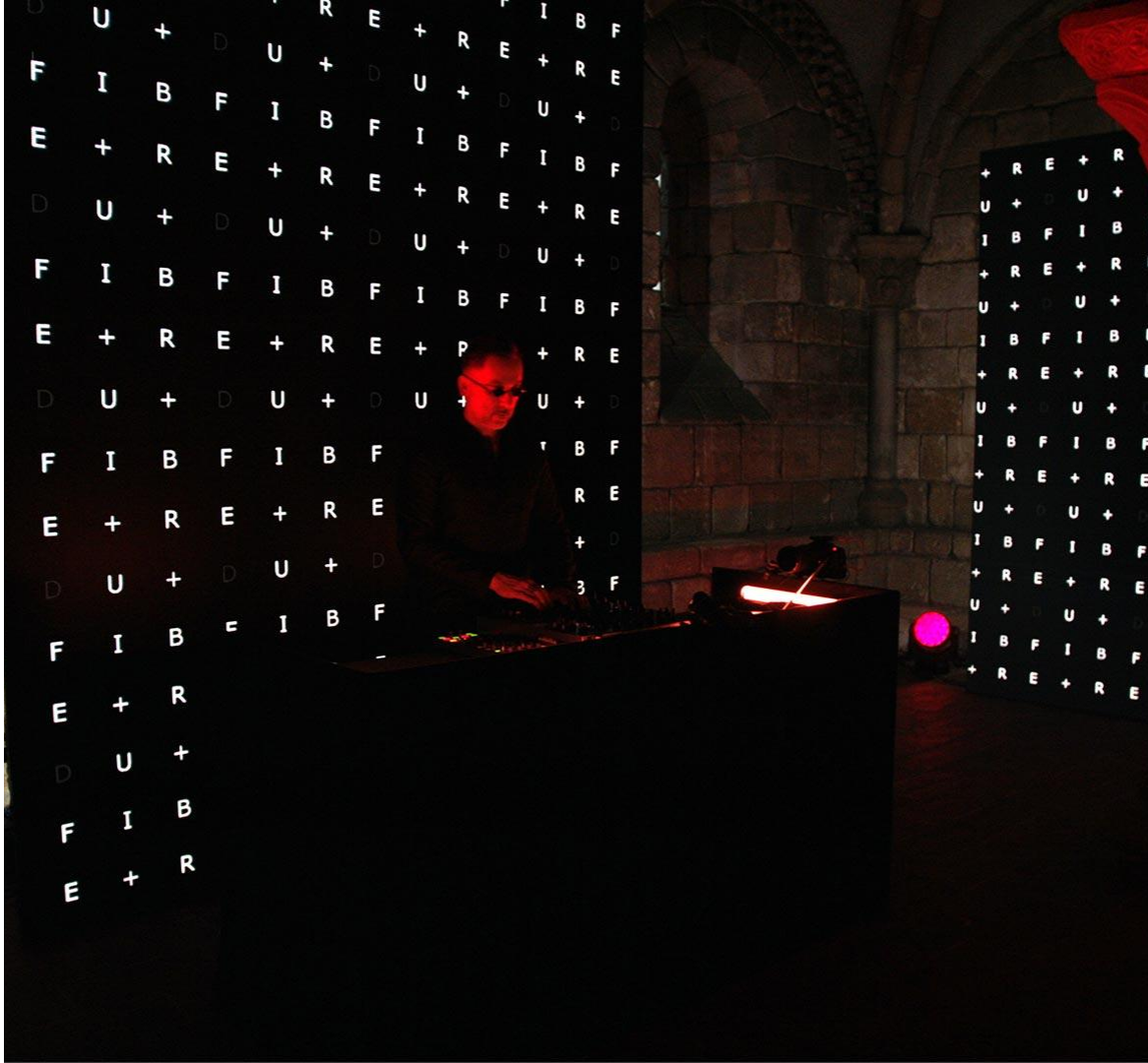
Dubfire's livestream originated from the beautiful 12th century Pontaut Chapter House in the Cloisters, a meeting place for monks formerly part of an abbey in Pontaut, France. To complement that, VVOX developed a set design as equally driven by the look and feel of the medieval location as by the techno tempo of the music.



At a glance

xR was ‘the natural choice’

VVOX had been delving deep into xR with its recent investment in a Disguise VX 2 media server and RX render node, so delivering Dubfire’s livestream in xR was a “natural choice” for its team. “You could say that everything led up to this point. We learned about RenderStream and how to use it to plug Unreal Engine into Disguise a while ago; we also have an LED volume here in our studio that helped us learn the workflow. But for this scenario we decided to use the actual architecture of the venue and mix it into the set design. It was a huge opportunity to evolve xR into something different,” says VVOX Creative Director Kamil Nawratil.



The challenge

Two weeks to set up with no time for rehearsal

VVOX had just two weeks to build a full playback system without rehearsing together with Dubfire to ensure it would work on site. The team also had to run some tests with the StYpe camera tracking system using floor markers. Although VVOX knew they had a handle on everything in the studio, they understood that virtual environments were completely different, and they were integrating physical environments into the shoot as well.

The team was also concerned about how long the spatial calibration and tracking would take, especially because they only had the LED wall behind the artist and satellite walls on the side. **“We didn't know exactly how to perfectly calibrate that. But within an hour it was all in place: The Disguise system achieved it seamlessly,”**

The solution

With the little amount of time given, the team at VVOX were able to create a five-chapter narrative for the one-hour performance. Blending between the real and virtual, they seamlessly weaved in futuristic, Blade Runner-inspired architecture, virtual lasers, motion capture characters interacting with the Chapter House, as well as using Disguise's new virtual zoom feature.

The set faded in and out of the five different Unreal Engine 'chapters' or scenes. Between each scene, were three to five minutes of live camera footage of the artist in the venue. "The big trick was essentially having an exact replica of the room in Unreal Engine," says Nawratil. **"We did an architectural scan of the room and, with the site tracking and spatial calibration in Disguise, it all snapped into place."**

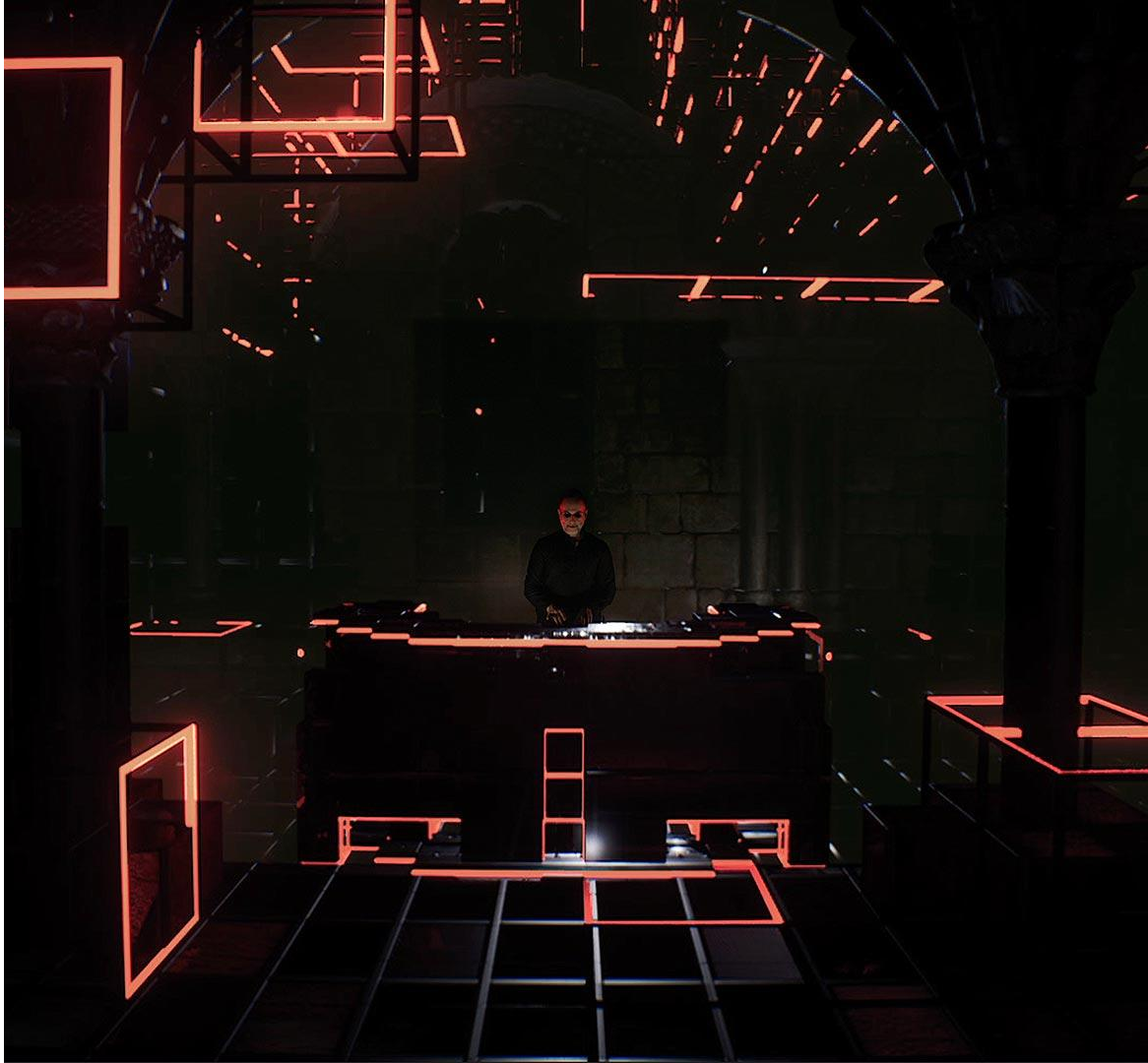
“It was amazing to be able to take this project into such a unique location for one day and basically launch a full xR experience without any kind of rehearsal. We would never have thought of delivering this kind of project without the Disguise and Unreal Engine workflows. The creative possibilities, the photorealism of the content and the stability of the system were unbelievable.”

Kamil Nawratil
Creative Director

The Results

Having the venue in Unreal Engine gave VVOX the ability to build different objects that would correspond to the real world, such as AR graphics wrapping around two columns in the centre of the room. “Because we couldn’t set down an LED floor, we had to obscure the table and the gear the artist was playing on with an AR element so the set extension made visual sense,” he explains.

The Disguise virtual zoom feature also came in handy during the process. “The room we were shooting in was 30 feet wide by maybe 20 feet deep. So the virtual zoom was a powerful tool that allowed us to build these additional worlds outside of the virtual room or even give the space a little more breathing room.”



Success

The one-hour stream showcased some of Dubfire's most eclectic and creative works yet, complemented by a creative set-up that has moved xR technology outside of a typical LED volume and into an art gallery to embrace the medieval architecture of the beautiful Chapter House.

"We were so pleased to essentially take xR out of xR, in the sense of leaving the volume that we're used to working in and moving to a live setting – still doing what xR is supposed to do but also taking advantage of the architecture of a very unique space."

Watch the full performance

Watch now

2
weeks planning and system set-up

1
week content development

5
scenes developed in Unreal Engine

1
hour livestream

Disguise equipment used

VX 2

Building on the strength of the VX 4, the VX 2 gives you the freedom to build out your technical capacity depending on the size of your production.

Find out more

RX

RX is our dedicated system for hosting content render engines, enabling new possibilities for scale out rendering.

Find out more

DESIGNER

Designer is the ultimate software to visualise, design, and sequence projects at every stage, from concept all the way through to showtime.

Find out more

In Partnership with

Composition and Performance: Dubfire
Video Team: Bespoke Studios
Creative Director: Kamil Nawratil
Director of xR production: Javier Cruz, Ben Forest
UE4 developer: Pasakorn Nontananadh, Emilio Ramos
LED lighting: Lightworks Interactive
Photogrammetry: MYND Workshop
Lighting: See Factor
Images: Sasha Bianca, Rory Higginson

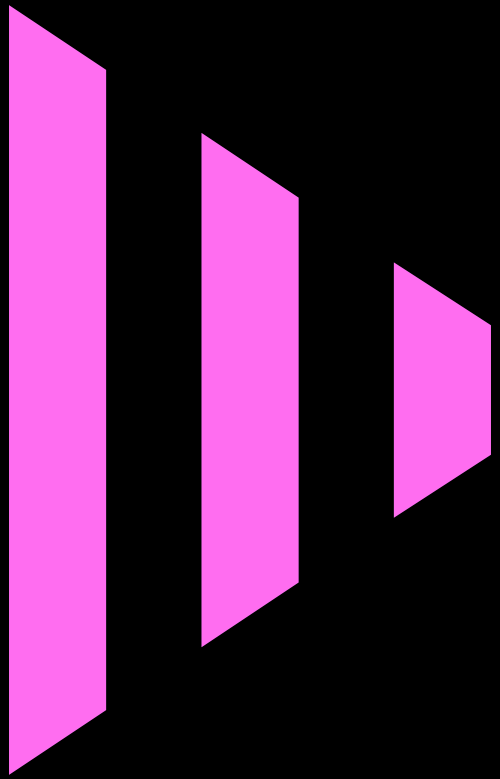
Get in touch

Curious to know more about us?
Want to master our production toolkit?
Need support on your project?

Our team will be happy to speak to you, whatever your query.

Get in touch

Get Started



e-learning programme