disguise xR powers Fortnite & Rocket League hybrid concert from Kaskade

<u>Epic Games</u> brought in American DJ Kaskade to host a hybrid in-person and virtual concert as part of its Llama-Rama event series, promoting Rocket League's upcoming season in Fortnite's Party Royale.

This case study shows how the disguise xR workflow supported All Of It Now (AOIN) and Far Right Productions to achieve a fully-immersive concert experience to enthusiastic fans within Fortnite and Rocket League's crossover event, all created within Unreal Engine.

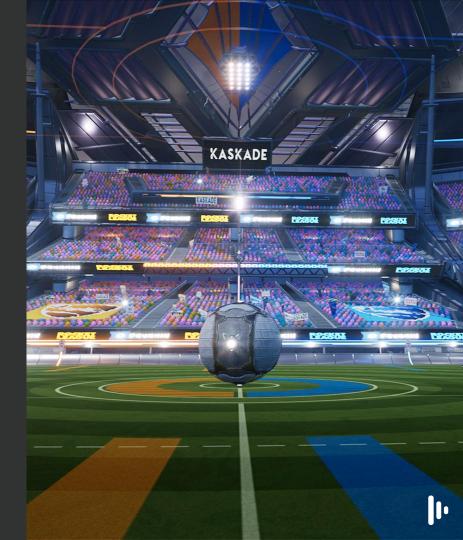


At a glance

The goal of the project was to push the boundaries of xR production and the interaction and integration of Unreal Engine upgrades.

Partnering on the project with Epic Games were Far Right Productions for show elementals, design and conceptuals; and AOIN for updating and integrating real-time environments, previously ported from UE3 to UE4 by Rocket League developer Psyonix, into UE4.26. AOIN also provided final applicable interaction between the control systems and design concepts and goals.

The aim was to use as many live event show control techniques and technologies as possible, building on Far Right's extensive hybrid event experience. They utilised DMX and OSC controls as well as timecode within the disguise xR software as the driving forces for the project's moving pieces. This created a dynamic event that emulated the best parts of a live festival while placing and animating virtual cameras where they wouldn't normally be found in a live show.



The challenge

A multifaceted approach

"Because we were using Unreal Engine for multiple use cases within the same project, we required multiple branches of the project file," notes Danny Firpo, xR Screens Producer for AOIN.

"We had the backplate xR branch, the front plate xR branch, the render branch, the lighting pre-vis branch, and the debug branch, all requiring different features of the project file. This made for a pretty complex process of merging some changes across branches but not others. Luckily, we used Gitlab as a version control platform, built to handle multiple branches, although it required refactoring the level layouts a few times in order to adapt to the changing needs of the production."



The solution

The project's concepts and goals were immersive and pushed boundaries, AOIN and Far Right worked closely with Epic, Psyonix and disguise to adapt unfamiliar team members to the new working environment presented by the xR workflow and clear any hurdles to create the one-of-a-kind concert.

The partners discussed upfront the necessity of building time into the schedule to perfect the workflow and deliver an incredible show. Having sufficient testing time to tackle the challenges of new technologies was essential.

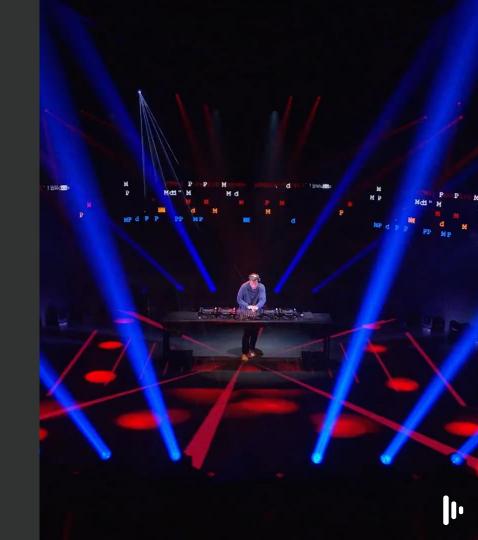


The solution

Pushing boundaries

"The level of creative and technical collaboration that we were able to achieve on this project was incredible," declares Firpo.

"Working with a team like Far Right who understand both the creative and technical requirements of xR at an extremely high level allowed us to do things that we haven't been able to do before. They understood what we were trying to accomplish in Unreal Engine and xR and pushed clients and vendors to the very edge of what's possible without ever losing sight of the end goal."



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"Partnering with disguise and being able to get their support on these projects benefits the outcome in a significant way. Since we are dealing with bleeding-edge technology it's always great to have the support of the company that developed the technology to ensure that the implementation is successful."

Berto Mora, xR Supervisor, All of it Now

Results

"Being able to shoot the show in a fully immersive 360° world environment, with DMX-controlled live fixtures, effects, lasers and environment control were some of our biggest achievements," says Guy Pavelo, Designer/Creative/Programmer/Producer at Far Right.

Virtual zoom

"Leveraging virtual zoom, the latest feature implemented within the disguise xR workflow, enabled shots that would have been impossible before due to physical limitations," adds Mora. The disguise RenderStream plugin also helped preserve screen space effects, such as reflections and bloom, which may have been adversely affected if other UE4 xR tools had been used, adds Firpo.



Results

More time to explore

AOIN also developed pre-visualisation tools that permitted the director to explore more of the worlds created for the concert. "The tools allowed the director to block shots and fly-throughs weeks before the show in order to build a shooting schedule and list of shots we could show the camera ops to replicate once we started shooting," explains Firpo.

Less time on set

Significant time was saved on set, according to Pavelo. System reliability, quick set up time, and fully operating integration enabled the partners to keep the artist's time on set to a minimum. All the takes required for the shoot were easily achieved while giving Kaskade back some time during his days on set. The full shoot was accomplished with only a minimal amount of overtime on behalf of PRG and their xR shooting team.

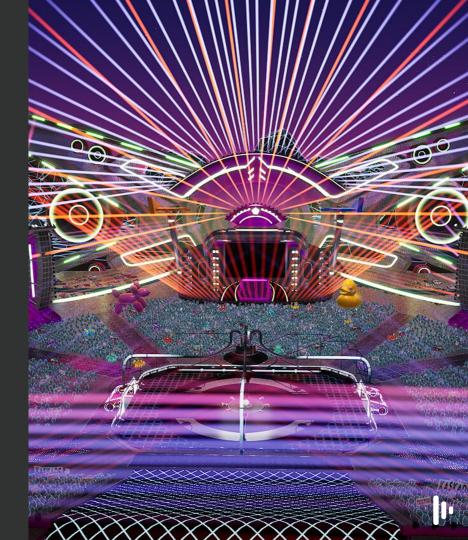


Success

"All parties, partners and team members came together," says Firpo "Everyone was on board and on the same page from the start of the project discussion, and proud of the end result and new ideas we were able to bring to the table and produce. The last thing we did was actually take a team photo of all crew and parties involved – I can't say we've done that on previous concert shooting endeavors!"

See the project highlights here.

Watch the full show here.



disguise equipment used

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In partnership with:

Far Right Productions

Designer / Creative / Programmer / Producer: Guy Pavelo

Designer / Producer: Steve Kidd Asst. Programmer: David Diamond Asst. Programmer: Daniel Slezinger Video Director: Johnny Hayes

Editor: Jake Gum

Technical Director / XR Systems Integration: Evan Cervantes

All Of It Now

XR Supervisor/UE4 Content Integrator: Berto Mora

XR Engineer: Anthony Vasquez

Lead UE4 Technical Artist: Jeffrey Hepburn

XR Screens Producer: Danny Firpo UE4 Technical Artist: Izzy Media UE4 Technical Artist: Mihai Nicula XR System Tech: Neil Carman UE4 Devops: Howard Wong

Shot at PRG in Burbank, CA







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