



SmartStage®

**EUROSPORT**

Case Study



Bringing the best of the action from the US Open into a COVID secure remote studio environment, to deliver game-changing new reality for sports broadcast coverage



## The Story

Prior to COVID-19, Eurosport intended to unveil their new and enhanced Eurosport Cube presentation studio for Olympic Games Tokyo 2020. However following postponement of Tokyo 2020 until the summer of 2021, Eurosport decided to utilise a selection of the technology to overcome the challenge of not being able to have a full on-site production presence at the US Open due to COVID-19 restrictions, enabling them to broadcast interactive and technically advanced coverage of the Grand Slam tournament.

Having delivered all consultancy, design, equipment and technical support for the very first iteration of the multi-award winning Eurosport Cube, which debuted at Olympic Winter Games PyeongChang 2018, White Light (WL) was once again appointed as Eurosport's lead technical specialist.

## The Brief

Due to understandable COVID-19 restrictions on-site, Eurosport had an extremely limited physical production presence at the tournament in Flushing Meadows. The Eurosport Cube, which both organisations worked to significantly evolve since 2018, was a potential solution to provide the next best thing – a mixed-reality environment to safely, and seamlessly, integrate real and virtual worlds.

The imposed travel and social distancing restrictions meant that Eurosport's tennis lead host and expert, Barbara Schett, was the only presenter based on-site at WL HQ in Wimbledon for each live broadcast. All participating athletes and other co-contributors had to be virtually beamed in from various locations, using different remote solutions to bring the action of the tournament into the Cube.

### PROJECT SUMMARY

Client: Eurosport

Event: Coverage of the US Open

Location: Studio facility at White Light HQ, Wimbledon

Onsite: August - September 2020





## The Solution

Since Olympic Winter Games PyeongChang 2018, Eurosport and WL have collaborated extensively to evolve and refine the Cube's design and innovative features with a view to the viewing experience for Tokyo 2020. Informed with the learnings about what had worked as intended and where further development was needed, the team reverted to the drawing board prior to designing the new version, which was then built with a footprint of just 3.5m x 3.5m and housed within a fully COVID secure studio at WL's HQ.

One of the major technical overhauls was the graphics workflow, which was re-designed to be a lot more streamlined and render-engine agnostic enabling content to be produced in a wider range of real-time engines. This allowed a brand-new, dynamic, and lifelike set to be built by Dimension using the Unreal Engine, with additional layers of content seamlessly added from other engines where necessary. One of the Cube's physical walls was removed to expand the studio, vastly improving the camera angles and sight lines available. Added virtual set extensions, powered by disguise xR, made it possible for the camera to operate beyond just the realms of the LED environment.

Multiple remote contributors, including regular Eurosport expert Mats Wilander, were virtually transported into the studio via video conferencing platforms and positioned within the environment as if they were physically present. Eurosport also wanted to utilise the United States Tennis Association's green screen facility located at Flushing Meadows to teleport the athletes into the Cube for post-match interviews with Barbara.





## The Solution

Transcending the capabilities of green screen alone, the Cube's LED video technology fully immersed Barbara in her surroundings - with the video screens making the virtual world visible. This enabled natural engagement with all remote participants, as if they were next to each other in the real world. Another feature of the Cube's new design was the seamless integration of lighting for the real and virtual worlds. This allowed the lighting operator to control both the in-studio lights and the lighting within the virtual set, as though they were one and the same, further merging the boundaries of reality.



### Core Technical Team

Eurosport  
Alex Dinnin - Director of Graphics & Innovation

White Light  
Andy Hook - Technical Solutions Director  
Harry Greenfield - Project Manager  
Alex Loftie - Media Systems Specialist

Gravity Media - provision of OB facilities  
disguise  
Dimension





## The Results

The Eurosport Cube's entire system was built as a multicamera system on broadcast grade hardware with full redundancy, providing flawless output for all live broadcasts across Eurosport's European network.

Eurosport's coverage of the US Open reached audiences across Europe, as well as millions viewing the Eurosport Cube interviews on social media, and its execution generated a wealth of media attention in the broadcast world. Alex Dinnin, Director of Graphics & Innovation at Eurosport comments:

“We knew we couldn't be at the US Open in person so the ambition was to transport the fans as close to the action as possible using the Eurosport Cube. We managed to create a seamless set with New York skylines in the background and brought pundits into the studio so it appeared as though they were actually stood alongside the presenter. Being able to bring the players from straight off the court into a green screen in New York and then beam them into the Cube studio has been a revelation.”

“Importantly, this wasn't technology for technology's sake. The solution had real purpose and impact. With spectators outside the stadiums and all pundits required to be back home, the Cube brought the Players closer to the fans and more deeply engaged audiences with the stories that mattered from New York.





“We are keeping some further innovations in the Cube up our sleeves for Tokyo 2020 next summer, as we seek to maximise engagement with our audiences with content that sets us apart.”

Andy Hook, Technical Solutions Director at WL adds:

“The Eurosport Cube’s evolved technology has been designed to integrate with a wide range of real-time render engines, enabling us to produce dynamic content for future events, including as we did for Roland-Garros later in the year. This offers greater flexibility for broadcasters to draw on their specific expertise and allows the best tools to be utilised for the right part of the solution. With the highly anticipated Olympic Games Tokyo 2020 still on the horizon, our Innovations team are continuing with R+D, with yet more exciting refinements and features to unveil in 2021.”

“ The ambition was to transport the fans as close to the action as possible using the Eurosport Cube.

Alex Dinnin, Director of Graphics & Innovation  
Eurosport





# Seen in the media...



This is "Tupac at Coachella" levels of crazy.

**Eurosport** @Eurosport · Aug 31, 2020  
Eurosport today launched the new Cube for our coverage of the US Open and we were thrilled to welcome number one seed @KaPliskova as our first-ever guest in the mixed-reality studio with @Babbschett after her first round win.



Better than Star Wars

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Sports broadcasting taken to a new level through technology. Imagine the professionalism/efficiency that would go into executing such a production.

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Ace! The 'Cube', which measures four metres by four metres, can remotely connect players at the US Open with a direct virtual eye-line to guests, hosts and experts anywhere in the world | @JWTelegraph



The future of sports TV coverage? Eurosport unveils mixed-reality 'Cube' studio f...  
The 'Cube', which measures four metres by four metres, can remotely connect players in New York to hosts and experts anywhere in the world | @JWTelegraph



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## Contact Us

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#ItsVirtuallyReality @WhiteLightLtd

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