DISGUISE

CASE STUDY

Powering a Youtube quiz show atop a virtual TV tower

In this case study you will discover how Disguise has teamed up with Certified Solutions Provider White Light to deliver a virtual trivia quiz show in Extended Reality (xR) for British Youtuber **Tom Scott**, reaching an online audience of **over 3 million.**

At a glance

Powered by the Disguise xR workflow, the ‘Disconnected’ quiz show was shot all in one afternoon from one location - White Light’s SmartStage, in their South West London studio.

The creative concept

The “Disconnected” virtual set found Tom and the contestants atop a broadcast tower with the host on a catwalk and the remote participants appearing inside screens suspended from the infrastructure.

Each of the four episodes feature an ad-break where Tom provides various behind-the-scenes tours of the show’s virtual set to help his fanbase understand the different elements of the technology that made the show happen.

How the show came together

All of the show’s episodes – three heats and a grand finale – were shot in one afternoon on one of White Light’s turnkey SmartStage xR facilities, adhering to government guidelines following the outbreak of Covid-19. Three contestants who appeared remotely on each weekly show were eliminated from play – or “disconnected” – for wrong answers until the winner emerged in the finale.

The challenge

Engaging remote audiences

Historically, quiz shows rely on face-to-face interaction. But in the current social distanced climate, Tom needed to find a way to bring his contestants together from different corners of the world without physically requiring them to be in the same space.

He also needed to create an environment for his show that is engaging and responsive to real-time game updates.

No previous exposure to xR

Although Tom and his team were well versed in creating television productions and game shows in a traditional broadcast environment and using real-time content engines, this was the first time they had exposure to working in an xR environment.

Tom's production team had a limited time to learn the xR workflow and use it to deliver an interactive experience for both the viewers and for Tom and his contestants.

The solution

Working with Disguise Global Technical Solutions Manager Peter Kirkup, Tom's content designer Mat Hill learnt the Disguise xR workflow and Notch real-time content render engine in three weeks to create a virtual environment for the show that matched Tom's vision.

Using Disguise xR, the team could expand the virtual environment beyond the physical bounds of the SmartStage and make it react to live game updates to capture the audience attention.

Disguise xR and White Light's SmartStage gave Tom and his team the ability to arrive on-site, load up the latest version of their content and immediately start shooting with the White Light team handling the technical production.

WHITE LIGHT

“One of the main advantages of working in xR is how instantly familiar the environment becomes; minimal on-site inductions/rehearsals were required helping to keep studio time to a minimum. It’s so much easier than working in a green screen environment because the content is there to see and interact with..”

Andy Hook
Technical Solutions Director

Result

An immersive virtual game show

Once on SmartStage, the Disguise xR toolset enabled a virtual set extension to be added seamlessly outside the footprint of the LED screens giving the appearance in-camera of a full 360º digital environment.

Many attributes of Disguise xR came into play during the production of “Disconnected.” Its automated camera calibration, alignment of the real and virtual worlds and colour calibration allowed the team to seamlessly add the virtual set extension and Augmented Reality foreground elements, while massively reducing the amount of time it would normally take to calibrate camera tracking and AR workflows.

Quick and seamless experienc

Disguise xR’s pre-visualisation features allowed Tom and his team to see how their content would look on-stage and work through design iterations without requiring the physical stage or studio. This was further facilitated through weekly video conferences with the whole team during pre-production.

Integration benefits

The Disguise workflow fully integrated with third party systems (lighting, tracking, content rendering) allowing the team to control the entire set-up from once central location.

Parameter control of the Notch real-time content and sequencing in Disguise allowed the team to program looks, sequences and events and have complete, live control over every aspect of the set design.

Live control of parameters from external sources permitted a game controller to trigger events and sequences, programmed in Disguise, from a web-based GUI on a touch-screen in the studio so the studio set reacted to gameplay in real-time.

Mo-Sys StarTracker was used for tracking the position of the camera, allowing Disguise to render the content from its field of view. Meanwhile BlackTrax was used to track any people or props on the stage allowing the studio lighting to automatically follow them, while permitting Tom to roam freely and avoiding the lighting unnecessarily casting onto the LED screens.

Image credits: Lorem ipsum

Success

The power of the SmartStage, Disguise's xR workflow, and content made in Notch real-time engine meant that the team could 'place' the studio exactly where they wanted it to suit the required camera shots - rotating, scaling and tweaking the design in moments without needing to render out any new content, all within moments of arriving on-site. Everything was recorded live and straight to disk for minimal post production and editing.

SmartStage's tight integration of video conferencing codecs into its system allowed remote participants to seamlessly appear as content anywhere on the set for low-latency natural conversation between the host and guests and real eye-lines and interaction, just as in a face-to-face game show.

Disguise equipment used

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

GX 2C

The GX 2C media server delivered dynamic Notch video content across the show's innovative visual canvas.

Find out more

SDI VFC

Using a removable VFC card meant the team could output their desired SDI video signal format without changing the system.

Find out more

In Partnership with

Show Creator and Host: Tom Scott
Question Producer: David Bodycombe
Set Designer: Mat Hill
Production: Labyrinth Games / Pad 26
White Light Consultants: Andy Hook, Harry Greenfield, Alex Loftie
White Light Technical Crew: Fraser Carr-Gomm, Sirus Fernandes, Joseph Lock
Lead Camera: Luis Quiterio
Composer: Benjamin Squires
Editor: Michelle Martin
Real-time Tracking System: BlackTrax
Camera Tracking System: Mo-Sys StarTracker
Real-time Content Engine: Notch VFX
Images: White Light

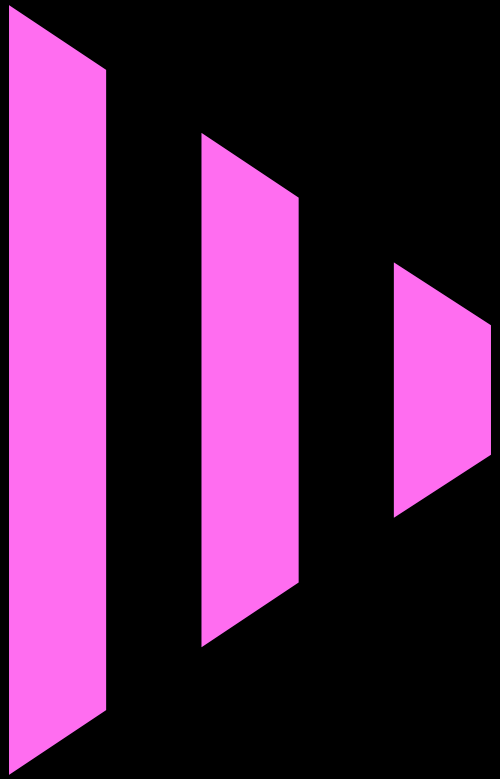
Get in touch

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



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