

**BUILDING THE NEXT
GENERATION OF
VIRTUAL PRODUCTION
TALENT AT
FUTUREWORKS
MANCHESTER**

JUNE | 2026

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Navigating a compact studio space, a first-floor installation, and an entirely new technology for their team, Futureworks turned to Target3D to bring a professional LED volume to their campus.

The Brief

Futureworks is a leading Manchester Higher Education Provider delivering degree programmes for the creative industries.

As these industries continue to evolve, Futureworks identified virtual production as a critical skill set for its graduates to master.

Through a successful capital funding bid, Futureworks approached Target3D to design and install a professional LED volume stage: a facility they had long aspired to but never thought would be possible.

The Challenge

Design engineering the solution presented two immediate practical constraints.

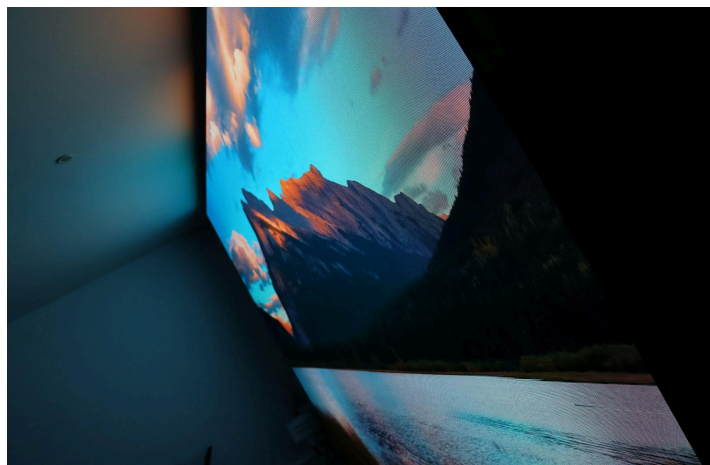
The first was space. Futureworks had a smaller studio environment to work with, which also raised questions around camera-to-screen distance and whether the system could perform effectively within those dimensions.

The second was structural. The studio sits on a first floor, meaning the weight-bearing suitability of the flooring had to be carefully assessed before installation could proceed.

Beyond the physical constraints, Futureworks was also making a significant technological step.

While they had taught virtual production previously, it was done without a dedicated volume, relying on green screen workflows.

The live camera tracking system that would form part of the new stage represented new territory for the teaching team.



The Solution

Target3D supplied and installed a 4m x 2.5m LED volume built around Absen 1.9 pixel pitch LED panels, delivering a high-resolution backdrop capable of displaying photorealistic real-time environments.

The system runs on an nDisplay workflow with Unreal Engine for real-time rendering, Live FX Assimilate for compositing, and RedSpy camera tracking, enabling true in-camera VFX with live perspective correction. Production is handled through a RED Komodo X production pack, bringing a professional broadcast-grade camera pipeline to the studio.

Throughout the process, Target3D worked closely with the Futureworks team, adjusting the specification where needed, addressing the structural and spatial requirements, and keeping them informed at every stage of the installation.



The Result

The LED volume has fundamentally changed how Futureworks approaches virtual production education. Students on the Art of VFX and Virtual Production programme now train on the same class of technology used on professional sets, learning the full pipeline from building environments in Unreal Engine to working with actors on a live stage.

The facility is also being opened up across faculties. BA Hons Independent Filmmaking students will use the volume as virtual production becomes increasingly accessible to independent productions. Editing for TV students, who produce short films as part of their course, will also work on the stage.

And, in a cross-disciplinary collaboration, Games Design students are building virtual environments to be loaded directly into the volume, giving both departments a real-world production context for their work.

Futureworks anticipates stronger graduate outcomes as a direct result, with more job opportunities available to students who can demonstrate hands-on experience with live tracking, nDisplay pipelines, and Unreal Engine in a professional production environment.



The Feedback

"It's obviously been a dream to have an LED volume installed, and it's going to really revolutionise how we teach and our graduate outcomes. We feel there are going to be more job opportunities for our graduates if they can learn this technology."

Working with Target3D has been a seamless process right from the beginning – from the initial quoting through to installation, we were informed every step of the way. If we needed to adjust anything, everything was no problem at all.

Jamie Scott

Programme Leader, BA (Hons) Art of VFX and Virtual Production

Interested in a virtual production stage for your institution? Get in touch with the Target3D team.