

Chinese University of Hong Kong

# Clean, Modern AV Solutions with Long-term Durability

## INTRODUCTION

The Chinese University of Hong Kong (CUHK) is one of the leading universities in Asia, known for its strong academic reputation and commitment to delivering high-quality teaching and learning environments.

Located on its main campus, the Lady Shaw Building houses several lecture theatres that support large-scale teaching activities. With increasing demand for high-resolution content and immersive learning experiences, CUHK initiated a comprehensive AV upgrade to enhance both visual performance and overall teaching quality.



## THE CHALLENGE

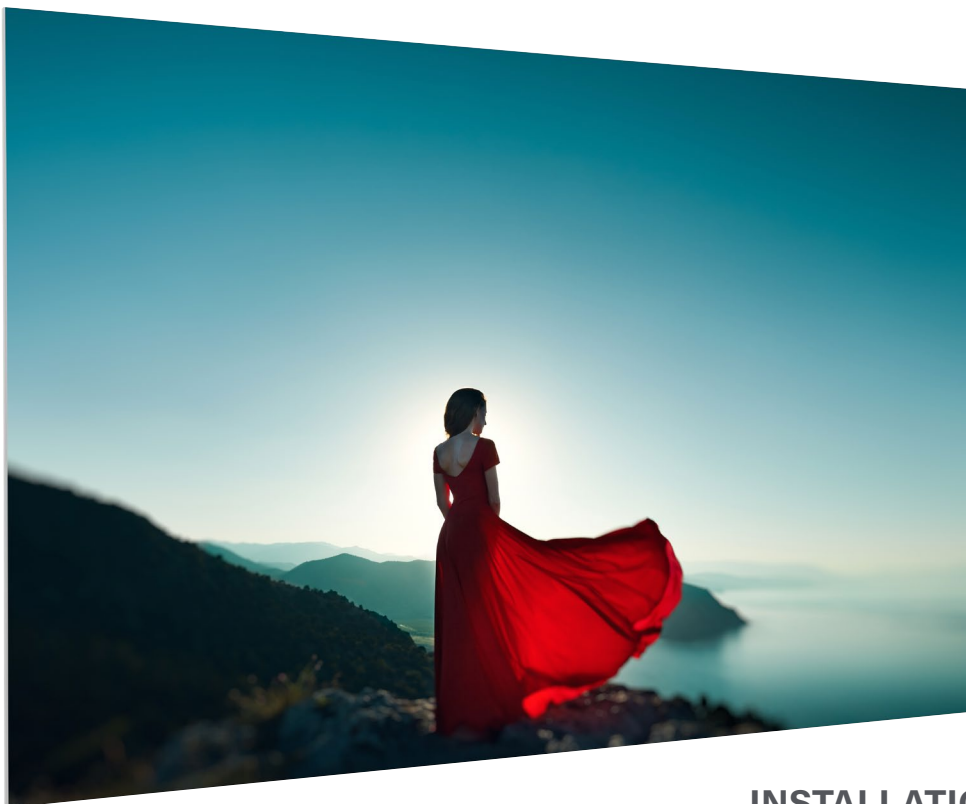
As teaching requirements evolved, CUHK found that the existing projection systems were no longer sufficient to support modern educational needs.

### Key challenges included:

Limited brightness and resolution, unable to support 4K content effectively. Aging screen surfaces causing uneven light distribution. Framed projection screens restricting usable image area. Reduced visibility for students seated at the back and side angles. In large lecture theatres, these issues directly impacted both teaching effectiveness and student engagement.

### The AV team required a solution that could deliver:

- Consistently flat and uniform projection surfaces.
- High optical performance under ambient lighting.
- Long-term durability for high-frequency usage.
- A clean, modern visual appearance that enhances the learning environment.



## THE SOLUTION

To address these challenges, CUHK selected Da-Lite FullVision fixed frame projection screens for the lecture theatre upgrade.

### The solution provided:

- **Borderless screen design**, maximizing image area and delivering a more immersive viewing experience.
- **HD Progressive 1.3 screen material**, ensuring excellent brightness, contrast, and uniformity even in well-lit environments.
- **Custom large-format screens (up to 254")**, tailored to suit the scale of the lecture theatres.
- **Spreader Bar reinforcement**, maintaining structural integrity and ensuring a perfectly flat surface over time.

This combination of design and material performance allowed CUHK to achieve a high-quality, future-ready projection solution.

## INSTALLATION

The installation included multiple large-format projection screens across several lecture theatres (LT1-LT6).

For ultra-large screens exceeding 200 inches, **Spreader Bars** were integrated to reinforce the frame structure and prevent any long-term deformation caused by gravity or environmental changes.

This ensured that the screen surface remains "dead flat" throughout its lifecycle, preventing image distortion and maintaining consistent visual quality.





## RESULT

The upgraded lecture theatres now deliver a significantly improved teaching and viewing experience.

Key outcomes include:

- Improved image clarity and uniformity, ensuring all students have a clear view regardless of seating position.
- Enhanced brightness and contrast, even in ambient lighting conditions.
- A cleaner, more seamless visual environment, thanks to the borderless FullVision design.
- Long-term reliability, supporting intensive daily usage in academic settings.

Garfield Mak, Audio-Visual Technical Supervisor at CUHK, commented:

“The most important factor for us is consistency and durability. With FullVision, the screen remains perfectly flat over time, and the image quality is clear and uniform across the entire surface. It significantly improves the overall teaching experience.”

## FUTURE PERSPECTIVE

As hybrid learning and digital teaching continue to evolve, AV systems are becoming a core part of the learning environment rather than just a supporting tool.

From an end-user perspective, especially in higher education, visual comfort over long periods is a critical factor.



**“THE MOST IMPORTANT FACTOR FOR US IS CONSISTENCY AND DURABILITY. WITH FULLVISION, THE SCREEN REMAINS PERFECTLY FLAT OVER TIME, AND THE IMAGE QUALITY IS CLEAR AND UNIFORM ACROSS THE ENTIRE SURFACE. IT SIGNIFICANTLY IMPROVES THE OVERALL TEACHING EXPERIENCE.”**

### **Garfield Mak**

Audio-Visual Technical Supervisor at CUHK

While LED video walls offer high brightness and impact, they are self-emissive displays, which can introduce higher levels of blue light and visual fatigue, particularly in lecture environments where students are viewing content for extended periods of time.

In contrast, projection systems paired with high-quality screens such as Da-Lite FullVision deliver a reflected light experience, which is softer and more natural on the eyes. This makes them especially suitable for lecture theatres, where comfort, readability, and sustained attention are essential.

Combined with its borderless design and consistent image performance, FullVision provides a balanced solution that supports both visual quality and long-duration viewing comfort.

With this upgrade, CUHK has successfully created a modern, future-ready teaching environment that prioritizes not only performance, but also the well-being and focus of students.



## PROJECT DETAILS

The installation at CUHK's Lady Shaw Building was completed in September 2025, featuring a total of six Da-Lite FullVision projection screens across multiple lecture theatres.

The deployment includes:

- Five units of 193" FullVision screens with HD Progressive 1.3 material
- One custom 254" FullVision screen, designed to meet the scale requirements of a larger lecture space

All screens are configured with HD Progressive 1.3 surface for optimal brightness and uniformity, and reinforced with Spreader Bars to ensure long-term structural stability and a perfectly flat viewing surface.

This combination of standard and custom screen sizes allows CUHK to maintain a consistent visual experience across different lecture environments, while addressing the specific needs of each space.