



## CASE STUDY

### THE BRIEF

## Enhancing Worship Experience with LED Technology

*This case study outlines the journey from initial enquiry to the successful implementation of one of the largest 4K direct view LED walls in a House of Worship within the UK, highlighting the benefits and outcomes achieved.*

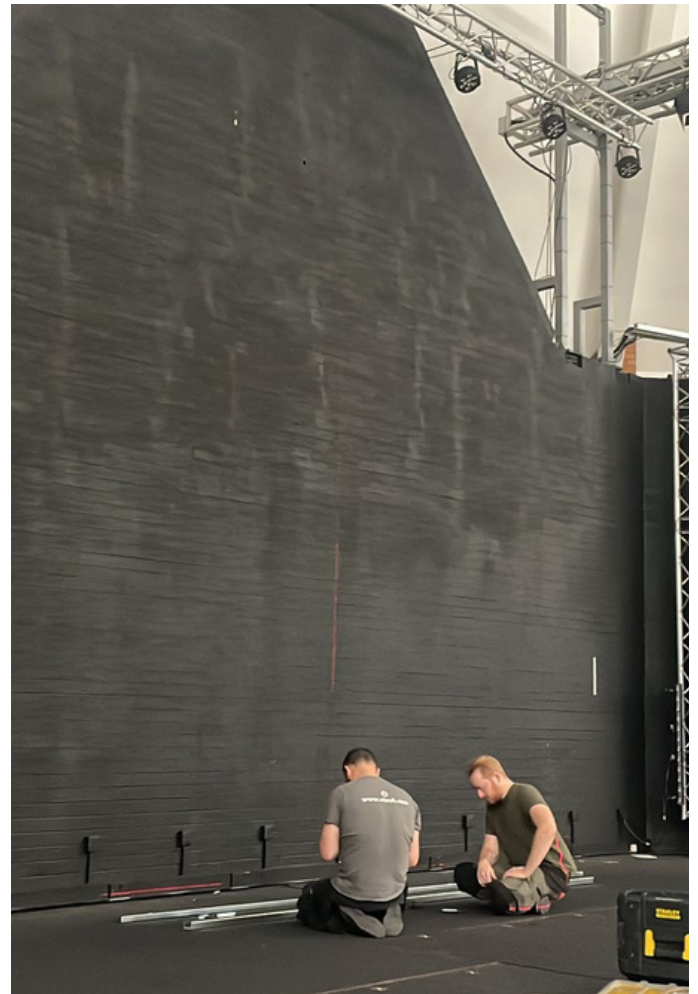
**Birmingham City Church**, a prominent place of worship, sought to replace their existing projection system with a more advanced and versatile solution. After considering various options, they decided to explore LED technology due to its flexibility, brightness, and ability to optimize for broadcast requirements.

The original enquiry was made in June 2022, expressing the need for a replacement projection system. The church provided initial specifications, including a larger screen size of 9.76 x 5.49m. Discussions were held regarding different sizes, pixel pitches, and resolutions to determine the optimal solution. Over time, the physical size of the wall and pixel pitch changed as various options were explored.

To ensure the quality and suitability of the LED product, a crucial decision was made to visit the Macropix experience centre in Milan, Italy. The end user, integrator, and representatives from Visualization as the LED provider, travelled to Milan to personally experience and assess the product.

During their immersive visit to Macropix's engineering facility, Birmingham City Church had the opportunity to witness first-hand the intricacies of LED technology production and staging. Macropix's product differentiation is propelled by their steadfast dedication to research and development.

By directing resources into electronic, electric, and mechanical engineering, Macropix continuously pushes the boundaries of LED innovation.



A key requirement of the church was high-quality filming and streaming services, so BCC undertook testing with the broadcast cameras they had brought with them to ensure the dv-LED was suitable. The high-grade dv-LED product chosen from Macropix for this purpose allowed the church to reach a much larger audience beyond the physical limitations of their building, facilitating the global dissemination of their message.

This commitment ensures that their LED solutions not only meet but exceed the industry standards. The visit solidified Macropix's position as a trusted provider of advanced dv-LED technology and confirmed the churches' decision to proceed to the next stage.

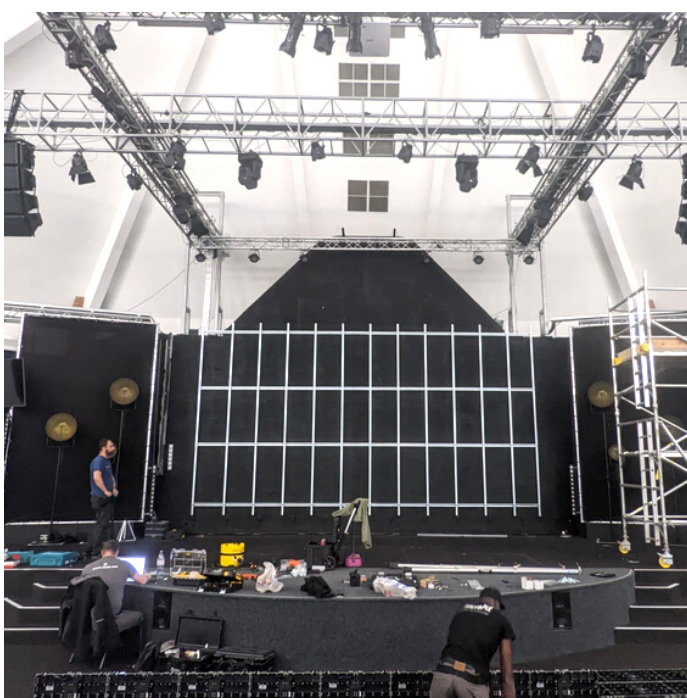


LED technology offered numerous advantages over the previous projection-based system. LED screens were significantly brighter, allowing for optimal visibility even in high ambient lighting conditions during live performances. The flexibility of LED lighting allowed the church to create a dynamic and immersive stage environment, resembling a rock concert setup. The absence of shadows or projected light on the band members further enhanced the visual experience and facilitated greater flexibility in stage design.



Placement of the projection screen was for Birmingham City Church. By opting for a dv-LED screen, they were able to lower the height, significantly improving the sight lines and overall comfort of the audience.

Furthermore, the elimination of shadowing and light paths associated with projection enabled the church to adapt the stage space to create a dynamic and immersive environment better suited to live performances - which often resemble those of a rock concert.



Following the detailed exploration phase and upon receipt of the order, a launch meeting was initiated with Visualization, TenAV, and the church representatives.

A site survey undertaken by Visualization produced a comprehensive report, and with agreements in place, the installation began.

It was complete and signed off within one week.

The mounting support structure, as well as the LED screens, were provided by Visualization from Macropix.



Direct-view LED technology has many advantages which meet the specific requirements of the church. The solution offers an extended half-life of 100,000 hours, compared to the previous projection system's 20,000-hour half-life. This increased longevity significantly reduces maintenance costs and ensures a longer-lasting investment for the church.

Additionally, the modularity of dv-LED removes the single point of failure. Individual tiles can be hot swapped without interrupting the overall display, eliminating the risk of a complete show halt.





The spectacular dv-LED implementation at Birmingham City Church has transformed their visual experience and broadcast capabilities. At an impressive 7m x 4m, it is currently the largest direct-view LED wall in a House of Worship within the UK.

## SNIPPETS & PRODUCT FEATURES

### Snippets

Visualization provided the following trade services:



Design



Rackbuild, testing & commissioning



Product supply



Aftersales service & support



Installation

### Product Focus

- LED Hardware
- Macropix IMAGINIS-J1.8 (7200x4050mm) (4K-UHD) LED
- Resolution (4K-UHD - 3840x2160 pixels)
- IMAGINIS-J Electronic Control System UltraDVI-4K