AV-over-IP Technology of Lightware Used to Create Spectacular Space of Lightroom Digital Exhibitions

Case Study

Lightware Visual Engineering
Lightroom has recently opened as a new home for artist-led shows in London’s King’s Cross. Lightroom is a joint venture of the London Theatre Company and 59 Productions. 59 Productions, renowned for its consummate mapping projects for the world’s most iconic buildings like the Sydney Opera House, the United Nations Headquarters, and award-winning theatrical works for the grandees of the Royal Opera House and the Metropolitan Opera, offered an idea of an immersive space set to display concepts and arts.

The first exhibition of Lightroom was staged in collaboration with the most acclaimed British painter and photographer David Hockney. David Hockney is one of the few consecrated artists who welcome interaction with technology and the possibilities that new forms of media bring. Lightroom’s inaugural exhibition of Hockney’s art is titled Bigger & Closer (not smaller & further away).

Lightroom is a four-storeyed purpose-built space, whose spacious interior of 1448 square meters presents an uninterrupted canvas for Hockney’s works providing a stunning 360-degree immersive experience embracing the works from across his artistic career. Floating over the walls, the paintings and photographs cast their spell on the audience, mesmerizing the visitors with the beauty and depth of Hockney’s artistry.

Blue I Theatre Technology, who deliver spectacular live events, have collaborated with 59 Productions for over a decade to supply solutions that successfully bring to life the creative ideas of the partner. For Lightroom, Blue I developed & delivered the onsite video system to power the exhibition. The project’s challenge was ensuring the massive content, distributed across the vast canvas played back smoothly. 59 Productions, a key client of Blue I, were specific about having a solution enabling uncompressed video signal delivery over a 10Gbps network.

James Roxburgh, Technical Director at Lightroom says, “Lightware have provided a critical part of the technical system to Lightroom, via Blue I our supplier for Video and Control equipment and we have been delighted with the support they offered to the technical team as we went through the integration process.”
For this heavy-duty task, Blue I chose Lightware’s UBEX AV-over-IP fiber-optical scaling system allowing 4K60 4:4:4 signal extension providing ultimate visual experience and multistreaming on 10G Ethernet network with dual 10G links.

There are 74 units of UBEX PRO20-HDMI-F100 extenders and the matrix management UBEX-MMU-X200 × 2 units, deployed on the spectacular site of Lightroom. With the standard Ethernet switch as a crosspoint, a virtual matrix was created with UBEX extenders connected to the IP network as input and output endpoints, the virtual matrix is managed and controlled by the UBEX MMU.

UBEX integrates seamlessly with the technology of Lightroom showing great compatibility with networking equipment. The solution enables the flexibility of decentralized architecture which is essential for the setting of the Lightroom digital exhibition space.

The UBEX’s open API features have been useful and easy to integrate to back up the media server.

For Blue I, it was the first project deploying UBEX at this large scale. Previously, in almost every live event delivered by Blue I, there has been some Lightware technology. This partnership grew confidence in the Lightware brand. Blue I has always received great support from the manufacturer.

The proof-of-concept testing was essential in the Lightroom project: Blue I were to check the system limitations and efficiency in terms of uncompressed signal delivery. They needed to establish how far they could push to see how much further they could upscale. Blue I valued support from Lightware at every stage of the project deployment. Lightware delivered on time with no supply issues.

On February 22nd, Lightroom successfully unveiled its first immersive digital exhibition showcasing the works of the acclaimed and loved David Hockney. From that day on, the lines queue to visit the glamorous display of his works. Lots of wows and selfies have been noticed, evidencing the success of the show.

David Hockney views technology as a great opportunity for artists. His exhibition at Lightroom proves this perspective. Blue I and Lightware are thrilled to support those who make the arts closer to the public and inspire artists to experiment with immersive AV technology.