Lightware UBEX Provides Best-In-Class Video Transmission for WorldStage

Case Study

Lightware Visual Engineering

Market	Country
Live Shows / Rental & Staging	USA

Lightware Equipment Used in Project

UBEX-MMU-X200 | UBEX-Pro20-HDMI-F100 RED | UBEX-Pro20-HDMI-R100 2xMM QUAD

WorldStage was founded over 30 years ago to embrace industry challenges and lead in developing new technical solutions with creativity and ingenuity. As a result, WorldStage continues to innovate in developing and delivering technology and solutions that propel the events industry towards more immersive, authentic experiences. WorldStage's technology and solutions can be found at a 20,000 attendee developers conference, a Fortune 500 product launch, a Tony-award winning Broadway musical, a wildly inventive media piece by a soon-to-be-famous artist or an extravagant benefit gala attended by stars of screen and stage.

"**In my role at WorldStage, I focus on finding new technologies and figuring out how to use them to support our clients' unique needs,**"

said Michael Kohler, director of emerging technologies at WorldStage.

"**Often, this means we're pushing technology to its full potential and probably in ways the manufacturer never intended. Lightware has a strong presence in the industry. They're known for providing reliable, industry-leading solutions. We use Lightware's matrix switchers in many of our projects and I had heard a lot about Lightware's UBEX technology, so I wanted to give it a try.**"

Kohler added, "At WorldStage, we spend a lot of time testing the technology before we utilize it in our clients' applications. For most of our clients, latency is unacceptable. I spent a week or two testing UBEX. Most of the time, I was pushing the system to its limits. It performed very well. It's very different from many existing video over IP technologies. The system was able to perform in ways that other similar solutions would not do. I stressed the UBEX solution to ensure it wasn't introducing any latency or causing any problems.

WorldStage provides audio, video and lighting technologies worldwide to the corporate, artistic and theatrical communities requiring unique and imaginative technical solutions for the live event spectacle, large meeting presentation, and permanent installation needs. WorldStage was selected for a large theater installation at a corporate campus in California.

visual engineering
LIGHTWARE

> " The client develops video games so it was critical for them to have a robust solution with zero latency," explained Kohler. "They wanted to utilize the theater as an all-hands space to unite their team. The goal was to provide a solution that distributes sources from various locations on campus and present the content in the theater. Kohler added, The client is a well-known video game developer. They consider their video games as works of art, and they absolutely should, so it was imperative that they could see every pixel. The people in the audience are graphic designers, artists and other professionals involved in the art that goes into creating the video games. It wasn't just about distributing the video from one point to another, but doing so with absolutely no loss in quality, signal degradation or introduction in latency. "

With Lightware's UBEX technology, video signals are handled fully uncompressed and transmitted over 20 Gbps. Using minimal, visually lossless compression, UBEX can simultaneously extend two Full 4K signals over two 10 Gbps fibers. UBEX can operate as a virtual matrix using a standard Ethernet switch as a crosspoint or as a conventional point-to-point extender

> " There were endpoints sprinkled throughout the campus, including conference rooms, breakout rooms and huddle spaces," noted Kohler. "We wanted to eliminate endpoints and provide completely lossless video quality. We selected UBEX because it's truly the only video over IP solution that provides lossless video. Other solutions compress the video, which wouldn't have provided us with the quality that we required for this project. "

UBEX is designed to be future-proof. Lightware's in-house engineers paid attention to conform to AV professionals' current needs and expectations while developing a flexible, versatile solution to support the growing needs of technologists.

> **Lightware's engineers are always able to answer my questions,** said Kohler. **"For this project specifically, we needed to verify a new type of network switch that Lightware had not used with this product. It was a painless and straightforward process. Lightware was very accommodating and ensured the system was performing flawlessly. It's nice to talk to engineers that understand the product in great detail. They know the product well enough to know how it works with other vendor products. There are not any vendor lock-in problems that are prevalent with other manufacturers.**

Kohler added, **Lightware's product documentation is amazing. Specific to Ubex, I learned a lot from reading the manual. As someone who reads the manual all the time, it's sometimes hit or miss with manufacturers. Lightware provides example configurations and details line by line. I was able to take the information in the manual to translate from Cisco and put it into Mellanox to make it work. It's nice to have clear, detailed documentation.**

Lightware is proud to power a global network of technologists who come together to create some of the most spectacular, emerging and innovative experiences worldwide. Still, their technology has been a trusted solution for powering mission-critical data for decades. Since 1998, Lightware has been developing matrix switchers, signal extenders and accessories for the professional AV market.

> **I've worked with Lightware's technology for over a decade,** said Kohler. **I have come to trust their technology because it's rock solid. The joke is that I would jump out of a plane with Lightware. Their technology has always performed the way the manufacturer said it would perform.**

Lightware recognizes that integrators can't have failures. Period. Lightware's technology is built to power high-resolution data through a purpose-built system, whether it's a Hollywood production or a corporate campus. Lightware UBEX (Ultra Bandwidth Extender) is a versatile networked AV, or AV over IP, solution. The optical unit uses a packet-based transmission to allow 4K UHD@60Hz 4:4:4 signal extension.

For more information on Lightware's UBEX, please visit:
lightware.com/product-families/ubex

Source:
https://www.worldstage.com/project/electronic-arts-launches-new-player-oriented-concept-dubbed-ea-play/