Delivering High-Quality Broadcast Productions

BSI Leverages Icron ExtremeUSB® Technology Over Local Area Network

Based in Burlington, Ontario, Canada, Broadcast Services International (BSI) has been a leader in sports production planning for more than 30 years. When the company began in 1987, it specialized in full- service sports production, technical design, consulting, and engineering. The team has an impressive list of accomplishments, including more than three decades of Olympic Games experience and 19 Emmy Awards for excellence in sports broadcasting. Over the years, BSI has expanded its portfolio beyond sports, managing the television production for concerts, theater performances, and more.

- **Challenge:** Needed fast, reliable, versatile, and easy-to-use USB extension over LAN to control and deliver seamless, high-quality broadcast productions.

- **Solution:** USB 2.0 Ranger 2304GE-LAN 4-port Gigabit Ethernet LAN extender.

- **Benefits:** Easy to install and use USB extenders that cover long distances over a LAN.

Challenge

Ensuring Seamless USB and Video Control Over Long Distances

To deliver seamless, high-quality broadcast productions, the BSI team relies on fast, reliable, and versatile USB and video extension technologies. A key requirement is ensuring the ability to locally reconfigure video and audio production equipment via a laptop, as this capability saves time and effort in a busy production schedule. Ease of use and recovery are also important criteria, as is the ability to quickly connect to a network for control and configuration. Finally, support for extending the range of USB over long distances is essential for certain types of productions, such as sporting events.

For a recent theater production, the BSI team, using Windows® 7 and 10 Professional host systems, needed to extend USB control to a set of high-end analog-to-digital/digital-to-analog AD/DA MADI converters over a Local Area Network (LAN). The AD/DA MADI converters were placed in locations that could not be accessed easily and the BSI team needed a way to manage them from a control room.

Solution

Reliable and Easy to Use

After a good experience using ExtremeUSB technology from Icron – an Analog Devices brand, the BSI team decided to use Icron's USB 2.0 Ranger® 2304GE-LAN 4-port Gigabit Ethernet LAN extender for a theater production. "While doing a distance test, connecting the Icron ExtremeUSB technology to network switches with 1.8km of fiber optic cable between them, our equipment would continuously reconnect to each other before I finished connecting the fiber optic cables together. The ExtremeUSB technology is completely transparent in regards to the equipment connected to it," said Ralph Grohmann, broadcast engineer at BSI. "At one point, we were controlling ten USB devices without any problems."

The Icron extension solutions cover long distances over a range of transmission media and are equipped to operate in a variety of environments. Without the need for software drivers, the solutions provide a true plug-and-play option. "The operator of the equipment connected to the ExtremeUSB extenders enjoyed the ability to perform a simple adjustment quickly, a previously monumental task, and get on to the real work at hand," said Grohmann.

Looking ahead, BSI sees other opportunities where ExtremeUSB extenders could play a role. "With events where distance is a concern, Icron's ExtremeUSB is going to help with control, especially since each remote extender has multiple USB ports."

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>
> **Ralph Grohmann**
> Broadcast Engineer, BSI

Conclusion

Optimized Production Efficiency

The Icron USB 2.0 Ranger 2304GE-LAN enhanced Broadcast Services International's ability to manage and deliver high-quality productions. By facilitating seamless USB and video control over long distances, this technology simplifies complex setups and improves efficiency. BSI's positive experience with ExtremeUSB underscores its value in overcoming distance challenges and streamlining operations. As the company continues to innovate, Icron's robust and user-friendly solutions will remain crucial in supporting their excellence in broadcasting.

Learn more about the Ranger 2304GE-LAN:

ADI Icron™