CITY THEATRICAL
NEW YORK · LONDON

CASE STUDY:

Multiverse Wireless DMX/RDM

Photo by Chris Usher/CBS

PROJECT SNAPSHOT

Project Name:	**Wireless DMX for new CBS Studio for *Evening News with Norah O'Donnell***
Location:	**Washington, D.C.**
Completion Date:	**December 2019**
Client:	**CBS**
Lighting Design:	**Lonnie Juli**
Lighting Package:	**Barbizon Capitol, Barbizon New York**
Scenic Design:	**Jim Fenhagen, Jack Morton Worldwide**
Scenic/LED Installation:	**Showman Fabricators, Inc.**
City Theatrical Solutions:	**Multiverse® Transmitter 900MHz/ 2.4GHz (5910), Multiverse Nodes 900MHz/2.4GHz (5902)**

CBS EVENING NEWS WITH NORAH O'DONNELL

CBS Evening News with Norah O'Donnell provides weeknight reporting and trusted news with original content from a unique perspective. The new CBS Studio in Washington, D.C. is the home for this programming, the *Face the Nation* show on Sunday nights, and special political broadcasts and election coverage.

CHALLENGES

During the three-month long lighting design and installation process as part of the relocation of the CBS Studio from New York to Washington, D.C. for the *Evening News with Norah O'Donnell* and *Face the Nation* television shows, CBS staff lighting designer Lonnie Juli and CBS gaffer and master electrician/programmer Jonathan Juli set out to specify, test, install, and start using a wireless DMX system that could work flawlessly for nightly broadcasts and special programming, and to keep the set as clean and wire-free as possible.

The set design for *Evening News* and *Face the Nation* included video walls, a glass anchor desk, a platform with lights and video screens the talent could walk on, and an overall graphic-intensive look that offered very few places to hide cables. The team sought a wireless DMX/RDM solution that could utilize the existing local DMX distribution and input power while providing wireless control for various lighting fixtures, LED tapes, camera-mounted lights, and wild floor stands, which were reconfigured locally to allow for easier daily operation as well as simplified troubleshooting.

SOLUTION

City Theatrical's Multiverse wireless DMX technology was selected based on its ability to broadcast multiple universes from a single transmitter in mission-critical situations, like live broadcast television. Using the 2.4GHz band, the Multiverse Transmitter is being used to broadcast two universes of wireless DMX data from above a small wall-mounted rack in the studio, which includes several ETC nodes, switches, and a power strip. The transmitter is wirelessly connected to 13 Multiverse Nodes, which are each connected to a Chauvet, Desisti, Gantom, or Lumos fixture. The team was able to set up the studio with a single DMX cable and external cables for the camera rig only.

"Multiverse has been bulletproof for us. It helped us avoid all the cable discussions. It requires very little power. The user interface on the Multiverse Nodes and DMXcat made setup very simple for us."

- Lonnie Juli, Lighting Designer

Photos by Chris Usher/CBS

SOLUTION *(Continued)*

While installing Multiverse as a new wireless DMX system, the lighting team found it had a good input power range, including line voltage AC, low voltage DC, or in the case of the Transmitter, POE. They used the City Theatrical's DMXcat® app to set up the Multiverse Transmitter via smartphone, and found its user interface, in addition to the user interfaces built into the Multiverse Nodes, made set up and control simple - not only for themselves, but for future operators with a range of skills.

During installation, the team also tested Multiverse for interference with other important systems used around the studio. Multiverse was found to be undetectable when it came to its affect on other systems, including audio. The Multiverse Transmitter and Nodes have been used as part of the new studio's broadcast since December 2, 2019.

Learn more about Multiverse Transmitters at:
www.citytheatrical.com/products/multiverse-transmitter

Learn more about Multiverse Node at:
www.citytheatrical.com/products/multiverse-node

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