



Photo by Nathan Avakian

## PROJECT SNAPSHOT

Project Name: **The Great Jack O'Lantern Blaze at Van Cortlandt Manor**  
Location: **Croton-on-Hudson, New York**  
Opening Night: **September 18, 2019**  
Client: **Historic Hudson Valley**  
Lighting Design: **Jay Woods**  
Lighting Direction: **Nathan Avakian**  
Lighting Installation: **Jay Woods Design, Inc.**  
Lighting Package: **4Wall**  
City Theatrical Solutions:  **Multiverse® 900MHz/2.4GHz Transmitter (5910), Multiverse SHoW Baby® (5900), DMXcat® (6000), Lightwright® 6 software**

## CHALLENGES

After 10 years of working on *The Great Jack O'Lantern Blaze*, the lighting design team was looking for a reliable, theatre-quality way to broadcast DMX data across an open field. The ideal wireless DMX system would maintain a small radio footprint, and work every night for two months for the enjoyment of a total audience of 170,000+.

In addition to needing wireless DMX technology that could withstand outdoor elements, distance and radio spectrum traffic, the ideal transmitter would be able to communicate with receivers that are in constant motion and require multiple universes of information, including a pumpkin-filled windmill and carousel. With the windmill, two universes of DMX data were required and receivers would maintain line of sight. With the carousel, however, the problem would be maintaining the broadcast of four universes even to the furthest side of the rotation, where metal structures and other lighting elements would reside in between the transmitters and receivers.

## Historic Hudson Valley

Presented by Historic Hudson Valley, [The Great Jack O'Lantern Blaze](#) is an annual event at Van Cortlandt Manor in Croton, New York that features over 6,000 hand carved Jack O'Lanterns on over 12 acres of historic buildings and landscape. The project requires a technically advanced lighting system that synchronizes and controls lighting effects for the entire property.

## SOLUTION

City Theatrical's Multiverse wireless DMX technology was selected based on its ability to broadcast multiple universes from a single transmitter even in mission-critical situations, like Broadway-style shows and installations. The windmill used four Multiverse SHoW Baby units only, and the carousel used a Multiverse Transmitter with four SHoW Baby units.

**“With the Multiverse Transmitter, we were able to focus on setting up and talking to a single device, as opposed to setting up multiple devices. Broadcasting multiple universes from one device means fewer power supplies, a more compact package, and potentially lower wireless DMX costs.”** - Jay Woods, Lighting Designer



### SOLUTION *(Continued)*

The lighting team installed four Multiverse SHoW Baby units, two as receivers and two as transmitters, for the two-universe windmill. They used one Multiverse Transmitter to transmit DMX data on the 2.4GHz band to four Multiverse SHoW Baby units as receivers for the four-universe carousel. All receivers were installed within one NEMA enclosure per set piece, hiding them from being seen and protecting them against the outdoor elements.

The team used two DMXcat Multi Function Test Tools to set up their Multiverse wireless DMX systems, including RDM capabilities, to make their vision come to life. They also used Lightwright 6's new labeling feature to stay organized, labeling all devices across 12 acres of property with their universe number, control channel, dip switch setting, and more.

**“Before Multiverse, I don’t think we would have been able to have DMX-controllable tech for spinning parts. The fact that we can be as intricate in design as it is this year is largely due to Multiverse wireless DMX/RDM.”**

- Jay Woods, *Lighting Designer*, The Great Jack O’Lantern Blaze



Learn more about Multiverse Transmitters at:  
[www.citytheatrical.com/products/multiverse-transmitter](http://www.citytheatrical.com/products/multiverse-transmitter)



Learn more about Multiverse SHoW Baby at:  
[www.citytheatrical.com/products/multiverse-show-baby](http://www.citytheatrical.com/products/multiverse-show-baby)