



Photos by @Jorgphoto

PROJECT SNAPSHOT

Project Name: **Multiverse wireless DMX/RDM at Tesla's [Giga Texas](#) "Cyber Rodeo" Grand Opening Party**

Completion Date: **April 2022**

Location: **Giga Texas, Austin, Texas**

Lighting Designer: **Rob Ross, [Rob Ross Design](#)**

Associate Lighting Designer: **Aidan Marshall**

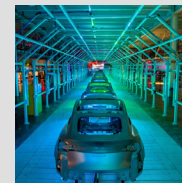
Assistant Lighting Designers: **Jiajing Qi, Dan Schreckengost**

Lighting Package: **4Wall, Christie Lites, Wireless Film Lights, The Design Oasis**

Production Electrician: **Eric Schoenberger**

Programmer: **Kendall Clark**

City Theatrical Solutions: **1 Multiverse® Transmitters, 900MHz/2.4GHz, 10 Multiverse Nodes, 900MHz/2.4GHz, 10 Panel Antennas, 1 RadioScan® Spectrum Analyzer, DMXcat® Multi Function Test Tool, Vectorworks Spotlight software**



The "Cyber Rodeo" Grand Opening Party, hosted by Tesla CEO Elon Musk, celebrated the electric vehicle maker's new \$1.1 billion factory near the Austin Airport in Texas. The event was attended by 15,000 guests.

Q&A WITH ASSOCIATE LIGHTING DESIGNER AIDAN MARSHALL:

City Theatrical, Inc. (CTI): What was the scope of the project, and why was Multiverse used?

Aidan Marshall (AM): Our end of this project included most of the exterior lighting for this large scale event. The whole system is Multiverse wireless DMX/RDM for two reasons: The long (up to 500') transmission distances, and the food trucks and carnival carts parked in the rodeo zone outdoors. These trucks and carts drove in the morning of the show and left directly after the guests, so running cable to every position was not an option. We needed a long range, reliable, wireless DMX system.

CTI: When was the Multiverse wireless DMX system used?

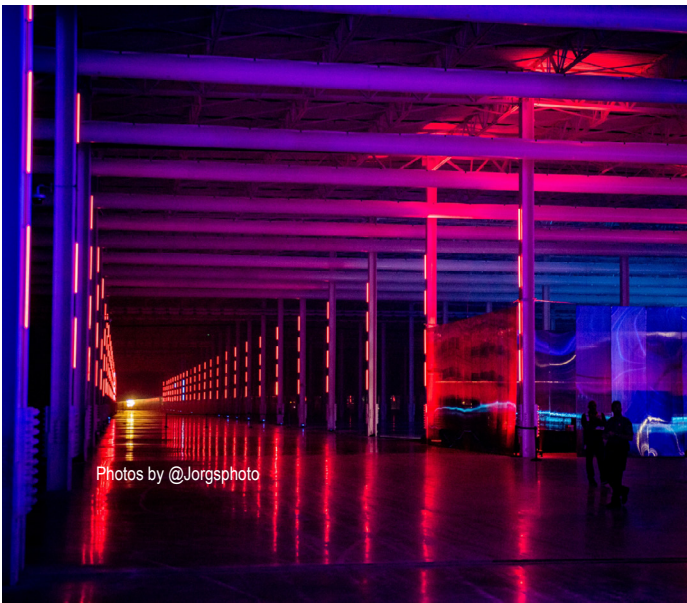
AM: During the pre-show, drone light show, and keynote – so the system was in use from 2pm to 12pm, for 10 hours. We used two separate systems of Multiverse wireless DMX.

CTI: How did the two separate systems help you achieve your design?



“The versatility of the Multiverse system meant we were able to reconfigure nodes on the fly, and broadcast nine universes of long-distance data transmission in two separate systems.”

- Aidan Marshall, Associate Lighting Designer



Photos by @Jorgphoto

Q&A (Continued)

AM: We shipped our Multiverse wireless DMX system to Texas without any clear plan to use it – the design process on this show was insanely fast (4 weeks from our first contact to the event day) and we thought it might come in handy. In the end, we used Multiverse in two separate areas:

1. The Rodeo: A 500-foot section of parking lot that was turned into a carnival for the day. We lit the area with Paladin Panels and JDC1 Strobes so we could chase effects across the face of the fixtures, and due to the distances involved, the whole system was Multiverse – eight universes out of the console on one Multiverse Transmitter. Both the 900MHz and 2.4GHz bands were used for that amount of data.

2. Mainstage Titan Tubes: (this is the huge runway of tubes on columns, see a celebrity video from the event [here](#)) Four universes of Titan Tubes were all driven wirelessly by the stage lighting team over at LumenRadio, as Titan Tubes only accept LumenRadio natively. Near the end of load, the choice was made to add a fifth universe of tubes to the system – on the other side of a concrete wall. Our solution was to use Multiverse wireless DMX with long range Panel Antennas in the 900MHz range to transmit 700 feet from the console, and then change to a LumenRadio transmitter for the “last mile” to the tubes themselves. Amazingly, we were able to run chases over the whole system with no visible lag.

CTI: Why did you use Multiverse’s dual band functionality for this project?

AM: On a show of this size, many wireless DMX systems from multiple companies were being installed the day before and even the day of the event. Combined with 15,000 guests and their phones, we knew we wouldn’t be able to get a full picture of the RF environment until too late to plan around it. We utilized adaptive signal hopping to give ourselves the best odds of success.

CTI: What was it like to use the 10 Multiverse Node units?

AM: One of the reasons we chose Multiverse Nodes was their easy setup; it’s a system you can give to a stagehand and have them address like a moving light.

CTI: How did you use City Theatrical test tools on this project?

AM: We brought a RadioScan to do our first site survey, and adaptive signal hopping for more. We also used DMXcat devices, which are a standard troubleshooting tool for us.

CTI: Why was Multiverse the right wireless DMX solution for this project?

AM: We used Multiverse Transmitters, Multiverse Nodes and Panel Antennas for nine universes of long-distance data transmission on this show in two separate systems. The versatility of the Multiverse system meant we were able to reconfigure nodes on the fly - and of course the adaptive signal hopping was a must in such a crowded RF environment.

CITY
THEATRICAL
NEW YORK • LONDON

© City Theatrical 2022. All Rights Reserved.