



Photo by Nick Merrick

PROJECT OVERVIEW

Project Name: **Multiverse wireless DMX/RDM Installation for Live Entertainment**
Venue: **The Fisher Center of the Performing Arts at Belmont University**
Location: **Nashville, Tennessee**
Project Completion: **September 2021**

PROJECT LEADERSHIP

Architect (for New Construction): [Earl Swenson Associates \(ESa\)](#)
Hall Design / Space Programming: [Theatre Projects Consultants](#)
Lighting Package and Fabrication: [Bradfield Stage Lighting](#)
ETC Control & Lighting Package: [Candela Controls](#)

From The Fisher Center at Belmont University:

Director of Production and Facilities: **Rusty King**
Resident Lighting Designer: **Rachel Blasengame**

CITY THEATRICAL SOLUTIONS USED



Multiverse® Transmitter 900MHz/2.4GHz



DMXcat® Multi Function Test Tool



Onboard Multiverse wireless DMX/RDM technology in ETC Source Four Series 3 LEDs

ABOUT THE THEATER



Located on the campus of Belmont University in Nashville, Tennessee, the Fisher Center for the Performing Arts is a 1,727-seat multi-functional venue that caters to diverse audiences with major concerts, plays, operas, dance productions, musical theatre and other performances and special events.

CASE STUDY Q&A WITH LD RACHEL BLASENGAME:



Rachel Blasengame

City Theatrical, Inc. (CTI): Rachel, congratulations on the completion of this new construction project, and thank you for choosing Multiverse as your wireless DMX/RDM solution at The Fisher Center. Can you describe your lighting set up for the theatre, and the wireless DMX solution you are using?

Rachel Blasengame (RB): Thank you! For The Fisher Center building, we are using [ETC's Paradigm Processor](#) for the house lights, as well as [MA Processing units and consoles](#), and ETC Nodes on stage and throughout the building for front wash light fixtures. We have streaming ACN set up in the building. We use one Multiverse Transmitter to broadcast wireless DMX/RDM,



Photo Courtesy of Rusty King

CASE STUDY Q&A *(Continued)*

which wirelessly controls ten rolling [Tomcat Dance Towers](#) around the stage. Each dance boom is loaded with three to five customizable [ETC Source Four Series 3 LED Lustr](#) light fixtures, which has been convenient to use as various productions and tours come through the center.

We also use DMXcat Multi Function Test Tool for troubleshooting if we have any issues. We have many light fixtures mounted by the balcony rails. Using the DMXcat to communicate with them to re-address via smartphone once the hardware is clicked in place on the fixture makes life very easy.

CTI: Is your wireless DMX set up on the 900MHz or 2.4GHz band?

RB: We use the 2.4GHz band. As a new build, the Fisher Center was built like a giant Faraday Cage. We haven't encountered any issues with Wi-Fi or other systems on the 2.4GHz band affecting our wireless DMX activity for lighting.

CTI: How does your single Multiverse Transmitter broadcast to the ten dance towers on stage?

RB: We use one or two universes per broadcast, and cascade the addresses to the onboard Multiverse wireless DMX/RDM receivers within each of the Source Four Series 3 LED fixtures. The universe count also varies by show, as some shows only want to use a few dance booms, or just the lower two lights on the bottom of each boom for foot lighting.

Sometimes we think about how we can use wireless DMX in new ways, to make our job better. We will let you know when we have a project on which we can set up our Multiverse Transmitter to broadcast all ten universes simultaneously!

CTI: Were there any unique challenges or learnings for your lighting setup that came up as part of the new construction process, on a college campus, during the COVID-19 era?

RB: You never stop learning when you get in a new building. It's such a big facility. We are still ironing out all of the network

DANCE BOOMS



"We use one or two universes per broadcast from our Multiverse Transmitter, and cascade the addresses to the onboard Multiverse wireless DMX/RDM receivers within the **Source Four Series 3 LED fixtures** on each dance boom."

- Rachel Blasengame, Resident Lighting Designer, The Fisher Center





Photos by Nick Merrick

CASE STUDY Q&A (Continued)

configuration. It took us a while to get things figured out, like the front washes, or how to put fixtures into our dome. We've reconfigured our Nodes, and figured out the best places for them to receive wireless DMX signals, and when it's best to use RDM over DMX. All in all, we've been making a standard to start from; I think that's been the biggest challenge.

CTI: Were there any productions that recently came through the Center that required you to overcome wireless DMX challenges?

RB: We had the Nashville Opera come through recently with a production of [DAS RHEINGOLD](#). There is not a lot of space backstage, and we needed side lighting to manage the production. We hired several technicians whose only job during the show was to move the dance booms forward, and then move them backward as needed. Being that we used Multiverse to transmit a wireless DMX signal to the fixtures on the booms, we only need one cable to power of the dance booms from overhead. We didn't have to worry about the crew moving the booms or the set and tripping on any wires. Going wireless has made our jobs much easier, and in that case, safer.

CTI: How did you get it set up to the dance boom using just one cable?

RB: We dropped the cable down from our gallery, so that power is coming down with two circuits loomed together. There is nothing tethering the dance booms at the bottom.

Rich Davis, a Lighting Designer in Nashville, was the one who recommended we try Multiverse wireless DMX/RDM using the Multiverse Transmitter. As soon as we demoed it, we were hooked.

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

RB: The ease of use. It works! Just power up your fixtures and go for it. It's so clean, you don't have to worry about it.

CTI: Use of onboard Multiverse in ETC fixtures?

RB: Overall it was very easy. Figuring out the SHoW Key on the Transmitter was my biggest hurdle. I spent a few minutes on it, and from then, it has been simple and reliable.

For more information about The Fisher Center for Performing Arts at Belmont University, visit: thefishercenter.com

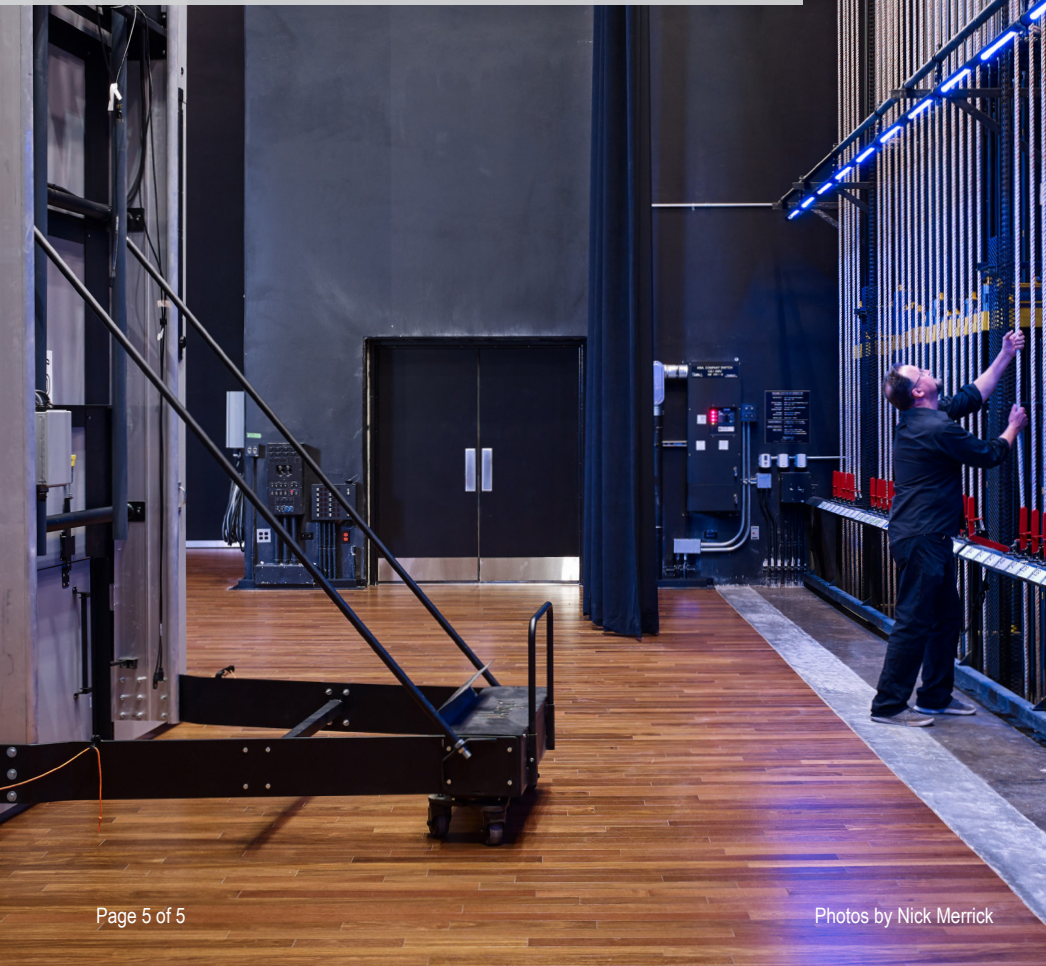
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BACKSTAGE



“We used Multiverse to transmit a wireless DMX signal to the fixtures on the booms and only needed one cable from overhead to power the dance booms. There is nothing tethering the dance booms at the bottom. Going with Multiverse wireless DMX has made our jobs much easier, and even safer.”

- Rachel Blasengame, Resident Lighting Designer, The Fisher Center



BALCONY



CONTROL BOOTH



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