



## PROJECT SNAPSHOT

Project Name:	<b>George S. and Dolores Doré Eccles Theater's Starry Sky</b>
Location:	<b>Salt Lake City, UT</b>
Project Completion:	<b>October 2016</b>
Lighting Designer:	<b>Cline Bettridge Bernstein Lighting Design (CBBLD)</b>
Architects:	<b>Pelli Clarke Pelli Architects; HKS Architects, Inc.</b>
Lighting Control Package:	<b>Oasis Stage Werks</b>
City Theatrical Solution:	<b>QolorFLEX® 4x2.5A Dimmers</b>



The 2,500-seat, state-of-the-art [George S. and Dolores Doré Eccles Theater](#) was designed as an urban performing arts center. It celebrates the architecture of Salt Lake City and transports theater patrons into an awe-inspiring rendering of the Utah night sky. This unique, three-dimensional ceiling feature was recently awarded a Citation at the [2018 IESNYC Lumen Awards](#).

## CHALLENGES

After years of conversation and research, the George S. and Dolores Doré Eccles Theater was designed as a Broadway-style urban performing arts center that celebrates the unique architecture, landscape, and skies of Salt Lake City. To capture the look of the Utah night sky within the theatre, hundreds of tiny, star-like LED lights would be suspended to look like stars over dark, acoustic material.

These tiny lights required a robust dimming solution that could work easily with low voltage LEDs to create organic-looking effects. The dimmers would also require the flexibility to be installed from a single DMX source 120 feet above the ground.

## SOLUTION

To re-create Utah's starlit sky indoors, LED strings were stretched across 78 metal frames, arranged in two layers. Within each ceiling section, the strings were separated into nine different dimmable zones, allowing for random control and cross-fading. This complex dimming scheme relies on 78 City Theatrical QolorFLEX 4x2.5A Dimmers.

**“City Theatrical’s QolorFLEX 4x2.5A Dimmers were our choice because they have the best dimming range for an 8VDC product, there are lots of options for setting curve and dimming cycle rates, and the great support from City Theatrical throughout the project.”**

- Francesca Bettridge, CBBLD Principal who led the project's lighting design



Photo by Jeff Goldberg/Esto



Photo by iLight Technologies

## TESTING

Taking the George S. and Dolores Doré Eccles Theatre's ceiling design from concept to installation required intensive planning and testing.

With vast uses of wireless technology already designed into the building for architectural purposes, the theatrical lighting installation teams were required to hardwire fixtures to dimmers, and used two to three universes of DMX for ideal performance. This required the team to connect the tiny wires from the LEDs to the dimmers mid-air - 120 feet above the ground - making tolerance for error slim to none.

LED lights of varying sizes by Tokistar Lighting were selected to create the look of depth in the ceiling. They were installed in LED strings over two layers, attached to the wire ropes at the end of each of the 78 curved 2x4 metal frames in the ceiling, to give the depth a three-dimensional effect.

Without existing circuit zones, the installation teams tested the configuration of fixtures until they found a way to group them that would look random, organic, and patternless, with the potential to be controlled to make shapes or addressed one channel at a time, depending on the needs of the show.

Following a thorough comparison of dimmers and dimming technology by over thirty professionals from various fields involved with the project, QolorFLEX 4x2.5A Dimmers by City Theatrical were found to provide the level of control desired for the selected low voltage LEDs.

Each of the 78 dimmers used a unique starting DMX address. These addresses were made available to the visiting lighting designers for the first few working performances at the theatre. The addresses were then used to create canned effects, which were made available to lighting designers going forward.

**“QolorFLEX 4x2.5A Dimmers work perfectly with the low voltage LEDs used in this project. They helped us create the 3D sense of depth required for the design, and will give future lighting professionals the control they need, and patrons a memorable experience.”**

- Gary Justesen, President, Oasis Stage Werks



Learn more about QolorFLEX 4x2.5A Dimmers at:  
[www.citytheatrical.com/products/qolorflex-4x2-5a-dimmer](http://www.citytheatrical.com/products/qolorflex-4x2-5a-dimmer)

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