

The Big Dam Bridge

Illumivision and W-DMX light the world's longest pedestrian and bicycle bridge in Arkansas/USA.

Wireless Solution Sweden AB and Illumivision, Inc. recently turned the Murray Lock and Dam Bridge in Little Rock, Arkansas/USA into a spectacular tourist attraction. The newly constructed pedestrian and bicycle bridge over Murray Lock and Dam, dubbed the "Big Dam Bridge", recently held a special ceremony to show off its new look, bejeweled with colored lights.



The bridge, which spans the Arkansas River, is 1288 meters long, with a span over the river totaling 1055 meters, according to the U.S. Army Corps of Engineers. Billed as the world's longest pedestrian and bicycle bridge designed and built for that purpose, construction was completed in August 2006. The addition of lights was completed a few months later, and is expected to make an icon of the structure.

Illumivision, Inc. of Edmonton, Alberta worked in conjunction with

Lighting Designer John Rogers of John Rogers Design in Little Rock Arkansas during the design and installation of the bridge lighting. 169 Illumivision Light Wave LX fixtures are installed at the base of the 13 piers across the span of the dam. The fixture is an IP66-rated wall-washing LED that generates color-changing effects, perfectly suited for the application.

Derek Pogany of Illumivision explained, "Originally the lighting for the bridge was to be designed with

1000 Watt metal halide lamps with blue dichroic filters. A mock up was completed in the fall of 2004 by Illumivision to demonstrate the effect and benefits of LED lighting. The Light Wave 84 and 108 Watt RGB give the flexibility to control color-changing effects, which makes the overall effect that much more dynamic."

The challenge was to provide DMX to 13 piers along the span of the bridge. The only practical solution was to use Wireless DMX.

Pogany explained, "There was no question about choosing W-DMX by Wireless Solution for this install. It had to have an IP65 rating and operate without any interference." One W-DMX transmitter with 30-meter antenna cable, RF booster and a 14dBi antenna sent signals to 13 W-DMX receivers with eight-meter antenna cables and a 2dBi antenna installed on every pier, each with a receiving antenna that feeds to an enclosure with 24 VDC power supplies and three-output DMX splitters. The distance is 91 meters from the transmitter to first pier antenna, and 21 meters between each pier.

Pogany said, "Since the moment the lights turned on at the opening ceremony, the system has performed flawlessly, and everyone is thrilled with the results. The lighting makes the bridge a spectacular sight and a special attraction for the city of Little Rock."

www.bigdambridge.com
www.wirelessdmx.com
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