read more...

Continued from July 2009 CTI Newsletter

City Theatrical SHoW DMX for U2 360° Tour

U2 set out on tour this summer with the goal of providing their fans with an incredibly unique visual experience. Designer Mark Fisher created a gigantic claw shaped truss, lighting designer Willie Williams specified nearly 200 PRG Bad Boys for the largest set ever built for a touring rock show, and City Theatrical's SHoW DMX helped it all happen by transmitting wireless DMX to the far corners of the stadium.

The show's central claw shaped truss has a center spire that rises over 50 meters above the show deck. Around the stadium are truss towers that contain follow spots and PRG Bad Boy moving lights. One of the many challenges the tour faced was to reliably get data to the towers without having to run kilometers of cable around the stadium. Wireless DMX of the highest professional quality with a proven track record of high data fidelity, minimum radio footprint, and system reliability was needed, and since the tour travels across the globe in outdoor arenas and stadiums it needed to be internationally certified and outdoor rated for protection from the elements. City Theatrical's multi award winning SHoW DMX® was chosen.

City Theatrical provided PRG with four SHoW DMX Transmitters in rack mount panels and eight SHoW DMX Receivers in outdoor rated enclosures. The Transmitters were fitted with standard 5dBi omni-directional antennas. The Receivers utilized 8dBi directional panel antennas. The omni-directional antennas allow the wireless signal to be transmitted to any location around the stadium, while the directional antennas allow the receivers to "listen" to the transmitters in a specific location.

With the number of fixtures in use and the large channel count, multiple universes of SHoW DMX had to be used. One of the concerns was that there would be wireless interference and congestion on a show of this magnitude. With the built in user configuration of SHoW DMX this proved to not be an issue. Technicians on site could monitor the wireless spectrum and, if required, make adjustments to the spectrum usage of SHoW DMX so all wireless systems in the stadium could work in harmony.

The system was first set up and tested for the tour in the City Theatrical factory in Carlstadt, New Jersey. The system was preconfigured in the PRG Birmingham, England shop for the load-in and technical rehearsals in Barcelona, Spain. The U2 360° Tour continues through October 2009.

View from the top of the stadium



The Barcelona set up



SHoW DMX Receivers in custom outdoor enclosures



Directional antennas on focusable brackets



Four universes of SHoW DMX, rack mounted, with remote antennas on custom brackets.

The view from the center spire.



