WHITE LIGHT®

Russia World Cup Broadcast - Case Study

Project Summary
Client: ITV Sport
Market: Broadcast
Location: Moscow, Russia
Preparation: Six months
Delivery: 3 weeks
Viewing Figures: 26 million (England v Croatia)

Using augmented reality to create a ground-breaking broadcast

The Project

Following WL's previous work on high-profile broadcasts such as the EURO Football Championships and the Winter Olympics 2018, the company was approached by ITV Sport to act as consultants for the design concept of their Russia World Cup studios.

The Brief

ITV Sport chose the HBS facility in Moscow as its studio location for the tournament due to the stunning views onto Red Square and St Basil's Cathedral. During the consultation period, WL realised the positioning of the window in the set meant viewers could only see the bottom half of the Cathedral, hence its iconic ornate spires were not visible. Using its experience with other projects as well as its investment in R&D, WL experimented with various creative and technical solutions to see how it could overcome this challenge.

Key Equipment
disguise media server, Arri SkyPanels, Novastar LED display, SGM P-5 LED washlight, Martin Aura XB LED, NewTek NC1 Studio, ELC dmXLAN node8, Black Magic HyperDeck Studio.

The Delivery

As a solution, WL devised the concept of extending the live view by adding ‘virtual windows’. The team conducted tests at its London HQ, experimenting with live cameras alongside various hardware and software workflows to see how the extended view could be best achieved. It was decided that live cameras would be fed into a graphics system to expand the views with in-vision LED video displays and through augmented graphics.

WL worked closely with Deltatre who provided a Vizrt graphics system for the augmented dome along with a Stype RedSpy tracking system for the studio cameras. A disguise media server was used by WL to map the content onto the physical LED displays in the set and, through the RedSpy tracking data; also allowing the 4K 180-degree stadium feeds to be perspective-tracked across the whole digital canvas. Four HD cameras were positioned in the studio window, producing live pictures of the Red Square view and feeding them into the graphics systems where they were blended together and placed in 3D space.

WL also designed and developed the scenic LED installation which included the dynamic pixel-mapped floor canvas - mapped via the disguise media server. WL also provided the entire studio lighting rig; the vast majority of which was LED fixtures, with a few “vintage” tungsten fixtures specified by the studio’s lighting designers as camera-candy.

Photos courtesy of ITV Sport