Architectural Projection Mapping
Project: Radio City Music Hall - 2012 Christmas Spectacular

Immersive architectural mapping took top billing at this year’s Radio City Christmas Spectacular in New York City. Seen by more than 1 million spectators each year, the Christmas Spectacular is an anxiously anticipated yearly dedication to the sights and sounds of the holiday season. Tasked with continually surpassing the previous year’s production, MSG Entertainment brought together a select group of precision audio/video manufacturers and service providers to help deliver on that goal. Central to this year’s production were 11 Digital Projection International (DPI) LIGHTNING 45-WUXGA, 3-chip DLP projectors, each delivering 30,000 lumens, enlisted to illuminate the historic theater’s ceiling and proscenium arch with awe-inspiring imagery.

Incorporating custom 3D imagery, a video-game style action narrative and animated scenic imagery that envelopes the stage, the 2011 Christmas Spectacular surpassed all existing standards for this annual event. Larry Sedwick, senior vice president production, MSG Entertainment, explained, “As one of the leading companies in live entertainment, we are focused on delivering our Christmas Spectacular to audiences with content that has never been presented before in a theatrical setting and utilizing advanced technology features available in today’s market, while still honoring those traditions steeped in our show.” Sedwick continued, “So, in our recent production, we used large scale digital projection and gave audiences the feeling of being immersed in an array of image, sound, lighting, theatrical, and pyrotechnic effects as each scene transforms to the next.”

New York-based batwin + robin productions created the projected animations that playfully enveloped audiences in more than 180 feet of bright, colorful visuals. At times, such as when a train traveled around and above the stage, animation traversed the arches as a visual feature. In other instances, DPI’s LIGHTNING projectors displayed accent imagery, supplying a visual wallpaper of sorts in order to complement the on-stage theme. Due to the varying depths within the existing proscenium arch, overcoming any shaded areas within the arch with incredibly bright imagery was critical. The digital content displayed on the arch, as well as the image blending, was managed by 7thSense Design Delta media servers. Visual Acuity, an independent media and design consultancy, advised on the key technological aspects of the application by supplying expertise in the overall projection, custom content and edge blending implementation.

Projectors Used
- LIGHTNING 45-WUXGA

Feedback from the Client
Blair Parkin, managing director with Visual Acuity, remarked, “DPI’s LIGHTNING projectors were selected for a combination of brightness, capability and image quality.” Parkin continued, “The projector, being single bodied with integrated lamp and change module meant that it was the best suited product for this application to mount inside the historical venue.”

LIGHTNING 45-WUXGA

Key Features:
- 3-chip DLP display with 30,000 Lumens / 2,000:1 Contrast
- Digital Projection’s brightest, most powerful projectors
- Incredibly rugged with advanced Warp & Blend + 3D functionality

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