Some-time after the discovery of fire, creative cavemen and women learned that by standing near the flame they could cast their shadow on a wall and use it to tell a story to the many others inhabiting the cave. Glorified in the 11th, 12th and 13th centuries, in the part of the world that is now known as the Middle East, Shadow Theater, also known as shadow puppetry, became a major genre of entertainment in the regions of Egypt, Syria, Iran and Turkey.

Hundreds of years since its popularity in the Middle East, on the other side of the world, Hamid Rahmanian, a graphic artist and creative movie-maker living in Brooklyn, NY, had the “bright idea” of using today’s state-of-the-art CANON REALIS LCOS PROJECTORS HELP TRANSFORM AN ANCIENT ART FORM INTO THE SPECTACULAR AND UNIQUE PRODUCTION “FEATHERS OF FIRE: A PERSIAN EPIC”

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projector technology to transform the shadow theater concept of “lights behind the performance” into an amazing entertainment experience based on one of the many stories from Shanameh, also called The Book of Kings.

Written by the Persian poet Ferdowsi between c. 977 and 1010 C, The Book of Kings is a national epic of the Persian-speaking world. It tells the mythical and, to some extent, the historical past of the Persian Empire from the creation of the world until the Islamic conquest of Persia in the 7th century. It remains the world's longest epic poem written by a single poet.

For Mr. Rahmanian, it was a labor of love, since he has already created a fully illustrated version of the book and would now select a story from it to present as a unique and magical Shadow Theater production. However, to help bring his concept to life one of the most critical factors would be to locate a projector that would meet his demanding light source requirements.

“In considering how to create a mesmerizing entertainment event, worthy of this great epic and the book I created, the choice of which projector to use was an essential one,” stated Mr. Rahmanian, the Creator, the Designer and the Director of Feathers of Fire: A Persian Epic. “After testing several from many of the leading manufacturers, we decided to go with the Canon REALiS WUX400ST Pro AV LCOS Projector. The short-throw capabilities, focal length, no screen door, exceptional image quality, compact size, virtually noise-free operation and overall outstanding performance were key factors in our decision.”

The Canon REALiS WUX400ST projector features 4000 lumens of brightness, 2000:1 Contrast Ratio, Canon’s renowned LCOS Technology with AISYS-enhancement, Native WUXGA Resolution (1920 x 1200), a Short Throw Ratio of 0.56:1 (it can fill a 7 ft. screen from as close as 4 ft. away), compact size and weight (13.4 lbs.), and offers flexible installation options and Network Management capabilities.
“Since the actors often worked very close to the light, the short-throw lens was essential,” added Mr. Rahmanian. “There are not many quality projectors with short-throw lens capability unless you move to projectors in a much higher price range. In the opinion of many, Feathers of Fire was the most elaborate Shadow Theater event ever performed, and the Canon REALiS WUX400ST projector was the perfect match for this incredibly detailed, outrageously costumed ‘cinematic-like’ experience. Engineered with exceptional quality and functionality, the projector was critical to help enhance the spectacular visuals and overall creativity.” The performance had over 130 computer-animated backgrounds, 150 puppets and eight shadow casters (live actors) playing 15 characters.

“One thing that makes the REALiS WUX400ST projector different from the other projectors that I tested is not only the short throw distance but the focal length,” explained Mr. Rahmanian. “When you do puppeteering, sometimes you need to have the puppet right next to the light to make it appear very big, while keeping it sharp and focused, and sometimes you can bring it away from the light, making it smaller. Varying the size of the image provides a lot of opportunities for puppeteers to play, but many of the projectors we tested had a very long focal length requiring the subject to be at least 3-5 ft. away from the lens to get a crisp image. Unfortunately, at the distance, you’d lose the scale you were looking for to make the magic happen. The Canon REALiS WUX400ST projector worked exceptionally well from less than 1 ft. away from the lens, allowing us to create focused shadow, which inspired me to come up with innovative techniques in the animation, making the presentation appear more cinematic, including the appearance of zooming in and out, panning and other effects never seen before in Shadow Theater. This was exciting.”

The stage for the production was only about 25 ft. deep, but the screen size was vast at 30 ft. wide by 15 ft. tall. Two REALiS WUX400ST projectors were alternated throughout the production to create a true feeling of animation, cutting (for example) from a wide shot to a close-up, and from a close-up to an entirely different location as if the viewers were watching a movie.
Creating an extravagant, live production, with the appearance of an animated movie, has a number of challenging requirements,” explained Mr. Rahmanian. “An interface and dowser were used to control the imagery between the two Canon REALiS WUX400ST projectors. One projector was designated by the color red and the other green. Because the action is happening live, the person at the controls had to watch to see that the actor was in position before switching to one projector or the other. It became even more challenging when one character had to jump and disappear. Audio from the computer also required the projectors to be orchestrated accordingly. There were over 1000 audio cues.”

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“Feathers of Fire was very inspiring for audiences as young as six years as well as their grandparents and even great-grandparents,” suggested Mr. Rahmanian. “They typically remained after the show for the Q and A just to find out how we were able to achieve such amazing effects. We could not have done it without the impressive REALiS WUX400ST Pro AV LCOS Projectors that Canon loaned to us, and the support they provided,” concluded Mr. Rahmanian.

“Throughout the two years of creation, Canon was there with an outstanding product and great people dedicated to help making my dream come true. Together we made the magic happen, and I am grateful for the support, along with their belief in me, and the entire Feathers of Fire team.”

Hamid Rahmanian
Director, Creator, Designer
Feathers of Fire