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# CASE STUDY

## AV Technology for Entertainment

### An AV Production Fit for a King

► The Final Result – A View from the Show Projected on the Tower of David



## Kramer Equipment Brings 4000 Years of History Alive at the Tower of David



### ABOUT THE CUSTOMER

Jerusalem's iconic Tower of David is located in the magnificently restored Citadel in the heart of the Old City of Jerusalem. Within the Citadel's walls, the Tower of David Museum of the History of Jerusalem in Israel initiates and undertakes projects that add new dimensions to the usual museum experience. A spectacular night show now joins a long tradition of exhibits and projects that juxtapose the ancient and modern.



### THE REQUIREMENT

Create a highly reliable outdoor AV system for projecting sound and images on the walls, archeological ruins, bridges, and hidden pathways of the ancient Citadel, the Tower of David.



### THE CHALLENGE

Install sensitive electronic equipment and distribute high-resolution DVI signals over distance in an outdoor venue that can withstand severe climate changes throughout the entire year. Install the system in an archeological site that dictates complex physical conditions, strict aesthetic demands, and extremely difficult cable routing.



### THE SOLUTION

As soon as the project was confirmed, Protech Integration had less than three months to decide on equipment, install infrastructure, design and assemble weather-proof projection rooms, lay fiber optic cables for video and control, and design command rooms. Projectors were placed in several locations, at various distances from the digital sources.

Protech Integration, a leading company of digital display and video in Israel, selected Kramer's solution to distribute DVI signals and to deliver these signals over fiber optic cables for high quality transmission regardless of distance or climate conditions.



### THE PROJECT DETAILS

Medialon Manager controls all AV equipment used in the show, including twenty projectors driven by ten Onlyview servers and ten Adtec high definition players. An Alesis hard disk audio player is used for the multichannel soundtrack and the sound system is produced by NEXO.

Every projector in the setup receives its signals using Kramer 621T and 621R DVI over fiber optic cable transmitter/receiver pairs and 4LC optical cables to ensure the highest-quality DVI transmission. 20 VM-2HDCCP 1:2 DVI distribution amplifiers provide continuous monitoring of the show over local monitors.



### CUSTOMER BENEFITS

"Because of the impossible time schedule, we had to install equipment and design the system at the same time. The only way to succeed was to work using a very precise time table" said Asi Goren from Protech Integration. "We tested several solutions for delivering the signals to the projectors and Kramer's was the best. In our long experience with Kramer's products they are very reliable, and that was a very important factor".

The night show created by Skertzo envelops the spectator in a powerful multi-sensory experience. Its dynamic collage changes the visitor's perceptions of time and place using motifs connected to the history of the city projected on the very walls where the history unfolded. The show, which draws many thousands of visitors to the museum each year, runs at least four times a week under almost any weather conditions.



# APPLICATION DIAGRAM



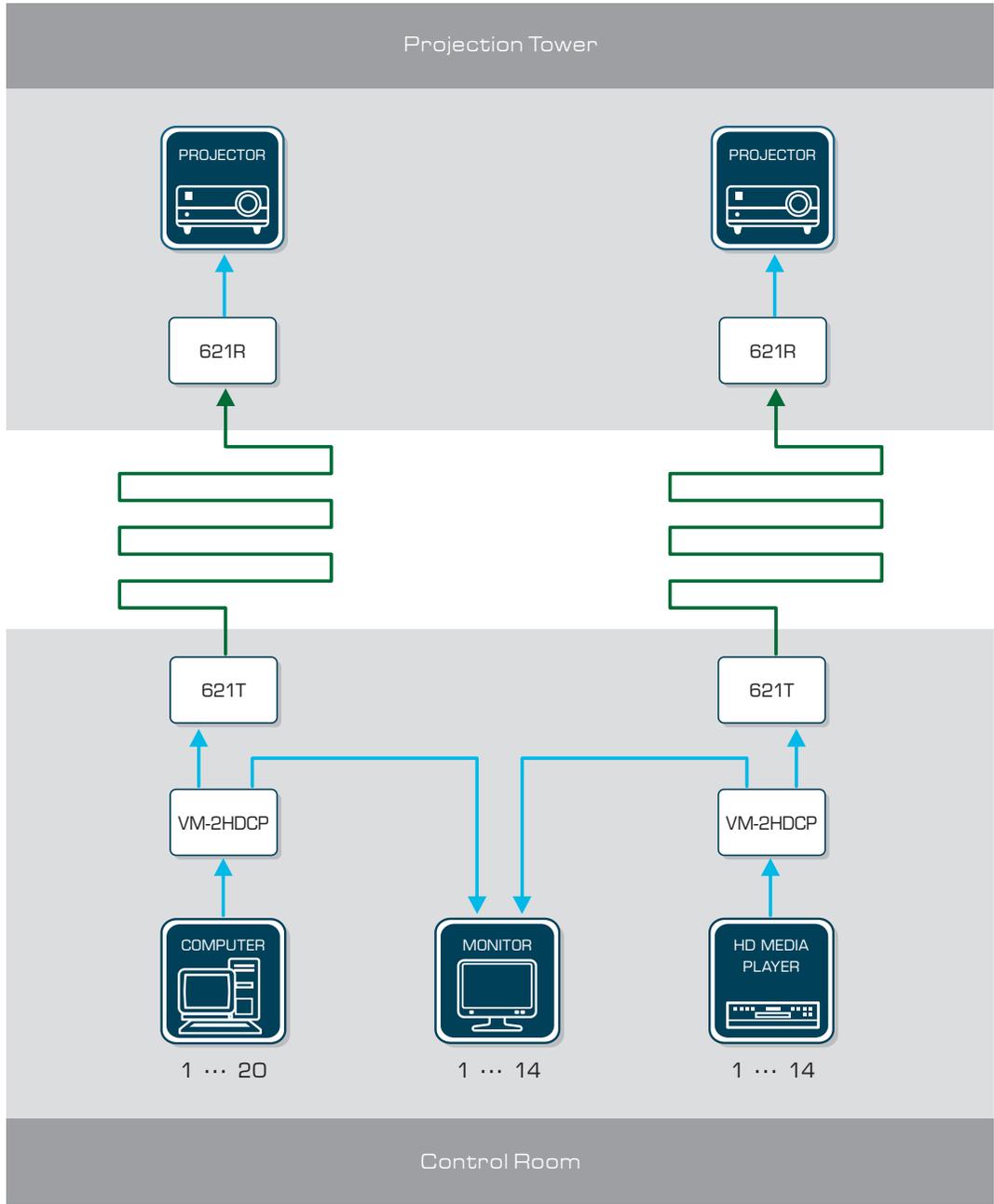
► Central Control Room



► Kramer DVI Products in the Tower of David



► The Final Result - Another View from the Show



### Cables:

DVI cable

CAT 5 cable

### Devices:

VM-2HDCP - 1:2 HDCP Compliant DVI Distribution Amplifier

621T - DVI Optical Transmitter

621R - DVI Optical Receiver



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