

Protech Integration has installed a complex but rugged audiovisual solution at the iconic Tower of David within the restored Citadel in heart of Jerusalem's old city. A spectacular projection and sound show uses the walls as its canvas.

## Technology fit for a king



The video show in all its glory. A combination of NEC and Sanyo projection covers the walls of the citadel with blended images.

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 line of exhibits that juxtapose the ancient and the modern.

The operators of the museum required the creation of a robust and reliable outdoor AV system for projecting images on the walls, ruins, bridges and hidden pathways of the ancient Citadel, the Tower of David.

A number of obstacles had to be overcome. Firstly, Jerusalem's changeable weather conditions made the choice of outdoor equipment crucial. Secondly, installing equipment on an archaeological site puts stiff restraints on the appearance, mounting options of equipment and makes cable routing particularly tricky.

Protech Integration had less than three months to design and install a system, including the construction of two weatherproof, air-conditioned projection rooms, laying of fibre-optic infrastructure and installation of the control rooms.

The layout system is governed by

a Medialon installation running on a standard PC. This controls a total of 20 channels of video. The main control room houses ten Adtec HD video players with content stored on the same number of Onlyview servers. Medialon behaves as a software matrix and masking system, mapping the content created by Skertzo onto the complex shapes of the walls of the citadel.

Kramer DVI switchers and distribution amplifiers are installed in the control room to route signals around, before they are transmitted over Kramer 621T/R transmitter pairs via fibre optic to the Sanyo and NEC projectors located across the site.

Stated Protech Integration's Asi Goren: "We tested several solutions for delivering signals to the projectors before we settled on the Kramer product. Our experience with their equipment has been that it is extremely reliable, which is why we selected it for this job."

In the control room itself, there is a 15-screen monitoring system giving a preview of each video channel

before it's transmitted, and elsewhere on the site is a second control room fitted with a CCTV system.

This second room gives a real time view of what is actually being projected so the operators have a handle on both ends of the production chain enabling easy diagnosis of any issues.

Sound reproduction is via a Nexo / Camco combination. Camco Q-Power series amplifiers and Nexo NX-series loudspeaker controllers drive Nexo point source boxes around the grounds.

Hanita Brill, director of marketing and Cultural events for the Tower of David concluded by saying: "The show itself is a dreamlike experience Around you you see images, myths and ancient happenings since the creation of the world. Things like the events in the Garden of Eden, and history of Jerusalem itself through the Byzantine, Roman, Muslim and Crusader periods. It's all done without words or commentary. We are really happy with the result, it looks amazing." 📺



The main control room has preview monitors for all the video channels in use, as well as CCTV so that operators can watch what's happening.

### Tech-Spec

#### Audio

Alesis HD24 hard disk players  
BSS Soundweb London matrix  
Camco Q-Power amplifiers  
Nexo NX-Series controllers

#### Video

Adtec HD video players  
Kramer 621T/621R fibre optic extenders  
Medialon showcontrol software  
Onlyview video servers