

Haifa Courthouse

Limited Time, Limited Budget: No Problem in Haifa

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As Israel's third largest city and northern capital, Haifa is home to Israel's two lower levels of courts (the Shalom - Peace - Court and the District Court). It is also a destination city of international sophistication. In keeping with that status, the government wanted the technology underpinning the court's operation to reach a concomitant level - all while maintaining a strict budget and adherence to an installation schedule as severe as the imposing Carmel Mountain that overlooks the city.

Down from the mountain, Haifa opens onto a broad natural bay offering beautiful vistas of the Mediterranean. This city of 250,000 inhabitants weaves together a rich tapestry of the ancient, the classic and the ultramodern and embraces various cultures, religions and ethnic groups, intertwining the fabric of Ultra-Orthodox Jews, Christians, Muslims, Bahai and Druze.

To serve this diverse community with a rapidly expanding judicial infrastructure, the government realized it needed to upgrade its facilities.



Haifa Courthouse consolidated 6 or 7 different courthouses into one, and is now the third largest courthouse in Israel.

Accordingly, it proceeded to construct a very modern building both from the architectural design point of view as well as its supporting technology.

As with any government project it took time. Haifa is the third courthouse in a 10-year government program and is the largest in Israel in terms of square footage and the number of courtrooms. The RFP for Haifa went out four years ago with the contract being awarded more than two years ago. Now complete, this new court will allow the consolidation of 6 or 7 different court

facilities within Haifa into one building, which ultimately will save the government money. Only the Supreme Court is housed separately and it is located in Jerusalem.

The new facility now hosts 65 courtrooms in total, with 45 of them equipped with modern sound systems. To address a project of this magnitude EMG, Electronic Management Group based in Jerusalem was brought in as the project consultant.

The entire low voltage systems, security and communication systems for the courthouse were handled by EMG, which specializes in design and project management of integrated multi-component security systems. System design was headed by Eli Pelz, EMG Managing Director, and Moshe Shaham, Senior Projects manager. In turn, EMG relied upon Barkai Benny Brookstein Ltd., for all detailed system design, proof of concept, installation, and commissioning.

THE SOLUTION

The courtrooms of Haifa, though visually stunning, had difficult acoustics. Rooms are outfitted with marble floors, walls and ceilings without acoustic treatment or wave-canceling angles in mind, and hardwood furniture is everywhere. So, audio specifications for the project called for feedback elimination as well as filtering. In addition, designers realized that in the court setting, highly qualified audio engineers would be absent and the systems would require automated mixing for up to 10 microphones and three zones, all while providing equalization capabilities as well.

The equipment complement includes, in each room, a 12x4 BIAMP Systems® AudiaSOLO, a

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BIAMP

Government: Haifa Courthouse

2x100 Watt Bittner Audio power amplifier, 2 to 4 sound columns from WHD and six to eight Clock Audio Products mini shotgun gooseneck microphones. Barkai also supplied and installed the general PA system, which is based on 3 IED 8000 System processors hooked on the same fiber network with more than 20 paging desks.

The key, of course, is intelligible audio, with precise yet easy control on a limited budget to be completed in no time at all. This presented a great challenge for Barkai to complete their portion of the project. Barkai principle, Ronen Brookstein explains why they chose Audia® as the basis for the system.

“Given the sophistication of the application, combined with the budget constraints and quick turnaround, we felt Audia was the only option,” said Brookstein. “For example, once we adjusted and tested three systems in three different types of rooms, it took only 15 minutes per room to upload the Audia DAP files and test the system, with no need to make further adjustments. It’s also easy to use, with no buttons or knobs, offers a one-box solution with no room for wiring errors, and provides maximum flexibility for the future.”

That future includes the possibility to change and/or add microphones, create a multiple output matrix for recording groups of microphones, changing EQ and other parameters due to change of hall acoustics or types of end units of equipment (microphones and speakers being used).

Of course, an installation of this magnitude requires more than audio and Barkai responded

with high-level video solutions as well. Barkai have also provided a very large Crestron Control System with more than 20 pieces of the ISYS TPS6000, 15” touch panels and controllers with a built in CPU for full redundancy. This system is actually used to control and monitor all the security systems in the project such as CCTV, Access Control and the like.

LAST MINUTE WRINKLE

But even with the power and flexibility of the Audia solution, Barkai’s engineering expertise was called upon. A last minute wrinkle was added that required mute capabilities for each judge position, but there was no budget or time to install additional boxes. “Our solution,” related Brookstein, “was based on BIAMP’s VRAM units and was achieved

mainly thanks to a very unique solution found by our engineers of having the mute button for the judge operate through the Audia controls without

the use of any relay box. Such an addition of 45 relay boxes would have killed the chance of accomplishing this mission due to budget limitations. The unique solution our engineers devised could be achieved and implemented only due to the fantastic flexibility and possibilities of Audia.”

When all is said and done, what Barkai has accomplished with the technology that enables the Haifa court system to remain state of the art is reflected in the personality of the city. Powerful, flexible and diverse are the defining characteristics of the systems in the courthouse, just as they define the people and the ruggedly plunging landscape that spills the mountain into the glistening Mediterranean Sea. ◀



Inside the Haifa Courthouse in Haifa, Israel.

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BIAMP Systems is an acknowledged international leader in the field of professional audio electronics. The company is recognized for delivering innovative and high quality electronic products, including the Audia, Digital Audio Platform, to meet the audio requirements of corporate boardrooms, conference centers, theater complexes, stadiums, transportation, Houses of Worship, educational centers and other installed audio applications.