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# MARDAN PALACE - HELVAR'S TURKISH DELIGHT

Helvar lighting control continues to 'light up' high profile projects around the world. One of the latest and best examples of what can be achieved with our range of products is at the Mardan Palace resort in Turkey. By pushing the boundaries in scope and scale this new development offers the perfect showcase for lighting control and what it can achieve in the hospitality sector.

Built at a cost of €1.11 billion, Mardan Palace is reputed to be Europe's most expensive resort. Located on the Mediterranean the development is comprised of a 560 room hotel (including two Royal Suites with private pools), the Mediterranean's largest swimming pool, a sunken aquarium containing 2400 fish, a 1115 m<sup>2</sup> luxury spa and a private beach. The team behind Mardan Palace has used their phenomenal budget to create one of the world's finest luxury destinations.

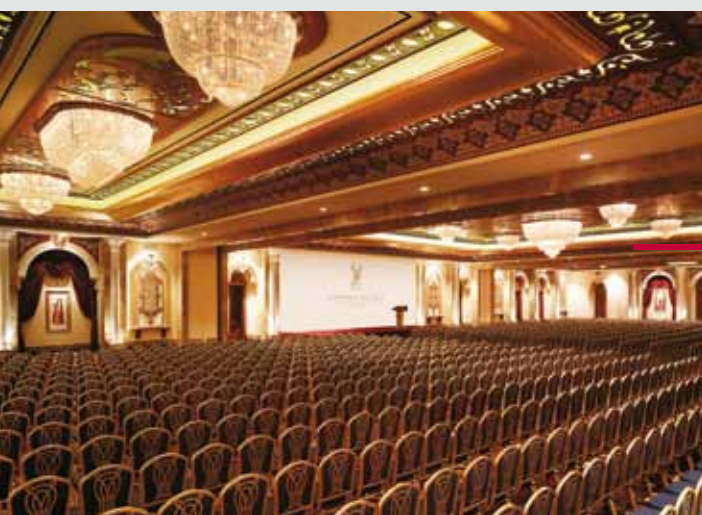
## MODERN MEETS TRADITIONS

Lighting design for the project was carried out by London-based Lighting Design International (LDI). The practice has experience in putting together large schemes in hotels, offices, retail, restaurants and high-end residential world-wide. Drawing on this vast understanding of working on major projects, LDI is able to combine a creative and intelligent approach to lighting design with an understanding of the complex technical requirements that a project this size can bring.

The architecture of Mardan Palace is inspired by Istanbul's historical buildings. There are three main structures: a European section decorated with modern elements of the west; the Anatolian side, inspired by the silhouette of the Kuleli Military Academy while using architectural features unique to the region; and located in between these two structures is the Dolmabahçe building which takes its design inspiration from the Ottoman Empire. The main lobby area measures an impressive 2800 m<sup>2</sup> and is decorated with antique furniture that is reminiscent of traditional Ottoman art. The 21 m high glazed ceiling is embellished with traditional palace motifs and hand decoration.

## PERFECTLY BALANCED LIGHTING

The lighting to the all the main 'front of house' areas is controlled by a Helvar lighting control system. The system, installed by Istanbul-based Arma-Elektropanc, ensures that the lighting levels in all areas, including reception, main restaurants, hotel corridors, ballroom and meeting rooms, are perfectly balanced to suit the needs of guests and staff alike, and also to run in the most energy efficient manner at all times. Mardan Palace is a vast space with numerous lighting circuits, and the Helvar system effortlessly manages the control system throughout the indoor areas of the resort, by dynamically adjusting light levels to enhance the guest experience in a highly flexible and adaptable way. ▶



In each of these main areas Helvar system allows a variety of lighting scenes to be automatically or manually selected at different times of the day. Each scene is pre-programmed to suit the varying uses of each space while taking into account the contribution of daylight. For example in the main restaurant area there are four main lighting scenes that are automatically programmed to run through the day; breakfast, lunch, dinner, evening. At any time the Maitre d' can override these main scenes to custom set light levels to suit a changing ambience. These changes can be easily achieved via the Helvar LCD TouchPanel positioned by the main Maitre d' station. Likewise at the kitchen service entrance there is another LCD TouchPanel with selections for setting up tables in either day or night, as well as separate scenes for cleaning and security.

## QUANTITY WITH QUALITY

The complete control system consists of hundreds of Helvar IMAGINE enclosures. Designed for architectural and large commercial applications IMAGINE system is designed with flexibility in mind. As Safak Koç of Elekon Energy Systems, the Helvar distributor in Turkey says: "When you have a large system with many thousands of channels you need a product that is capable of doing many things well. Not only does IMAGINE operate as simply as a 12 channel system it also allows lighting scenes to be changed at the touch of a button thanks to the pre-programming options available. Furthermore, it is very simple to program and monitor the system via the Windows®-based graphical interface. An added bonus is the built-in astronomic time clock that takes into account seasonal changes (spring, summer, autumn, winter) and automatically re-programs the lighting levels to suit."

For each separate zone or group of luminaires at Mardan Palace there is a dedicated programming data socket which allows the connection of a laptop for configuration of the control system. It is also possible to do this by using wireless network in the hotel or remote connection via Internet. A special Helvar / Bang & Olufsen interface was developed for the project to allow B&O remote handsets to adjust lighting levels in certain areas. In addition, the Helvar system also interfaces with the building's fire alarm system, so that, in the event of a fire alarm being activated, all channels are immediately brought up to 100% output. ■

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Helvar lighting control system creates desired moods in the Mardan Palace; for example in the European style bowling bar, high-end restaurant, stylish jazz club and the gorgeous ballroom.





## SYSTEM FACTS

3338 channels of dimming / switching

27 x 900 Imagine Lighting Routers

35 x Imagine ESR Racks

- 197 x 2 channel Thyristor Dimmers
- 88 x 2 channel 1-10V Ballast Controllers

112 x 12x10A Thyristor Dimmers

69 x 4x10A Thyristor Dimmer

55 x 4 channel 1-10V Ballast Controller

116 x 8x16A channel Relay Unit

21 x 402 Power Supplies

21 x 942 LCD Touch Panel

224 x DIGIDIM Modular Panels

4 x Helvar 312 Multisensors

5 x Helvar Partition Key Switches

25 x Bang&Olufsen controllers

Lighting Designer:

Lighting Design International (LDI), London, UK

Installer:

Arma-Elektropanc, Istanbul, Turkey

## ELEKON ENERGY SYSTEMS - Helvar Certified Partner

Voted Helvar Distributor of the Year 2009, Elekon Energy Systems covers Turkey and the surrounding geographical area. Founded in 2006 to generate effective and economical solutions for clients, Elekon manages project design, consulting and engineering without compromising international standards or local regulations. The company provides a rapid and accurate service via its 14-strong experienced, technical team. Safak Koç, General Director of Elekon has been working with Helvar for more than 10 years during this time has installed systems in Turkey, Azerbaijan, Libya, Iraq and Algeria. Most of these projects are at the prestige end of the market and include 5 star hotels, (i.e. Mardan Palace) and the presidential palace in Baku, Azerbaijan. ■



Helvar Distributor of Year 2009, Elekon Energy Systems, has done remarkable work in Turkey and surrounding areas. Starting from the left: Yildirim Arslan, Aydin Sarikaya, Sonay Uzun and Safak Koç.