

Home Automation – To Luxury Standard

World standard in uniform design for apartment building in Seoul

Winner
KNX Award 2010
Category
International – Asia



In the 18 luxury apartments about 500 KNX components control lighting, heating and solar screening functions.

The view from Mark Hills across the River Han and the Seoul skyline is breathtakingly beautiful. To the south of the ten-million-inhabitant metropolis and 600-year-old capital of Korea is a new development including luxury apartments. These are the residences of famous film, music and television stars and bosses of industrial corporations, banks and stock exchanges.

The 18 apartments in Mark Hills, the KNX installation of which was selected for the International Award Asia, are also reserved for the 'privileged' classes. The apartments, with their 400 m² of living space, are equipped to high quality standards including building services, which are mostly controlled by KNX. And this, in spite of the fact that it is not easy to prevail against the usual national technologies. Because home network systems are very popular in Korea – for example, systems made by Samsung or LG. Dana Corp., with hitherto 30 completed

projects, is an experienced and competent KNX system integrator in Korea, and was able to convince designers and building owners of the world standard for the 'intelligent home'.

Consistent appearance of operating units

One argument for the KNX building system technology was the multi-functionality of the bus buttons. This means that residents only need one control unit to switch on and dim the lighting, move and position the blinds and control the

room temperature. Another convincing feature was the effective conservation of energy through single room control – even more so as this could be implemented within an overall uniform design. This comprises a large selection of aesthetically pleasing switch designs and is another advantage of KNX amongst worldwide competition. The timeless Berker KI program is a perfect match for the bright and modern living environment.

Integrated home network system

The building, with its 18 apartments on nine levels and underground car park, is equipped with modern building services; it features a passenger lift, gas boiler for under-floor heating and hot water supply, air conditioning units, solar screening system and safety technology for fire alarm and intruder protection. The KNX controls for lighting, blind control, curtains, heating distribution, hot water circulation and clothes dryer are designed as island installations. Thanks to the open protocol, it was possible to integrate LCD touch panels that are typical for the country in order to allow comfortable central operation via KNX/RS-485 gateways. These can be used to call up operating and control menus for the

different installation elements. In addition, residents can use the Home Network Server to set and control pre-set functions for lighting (on/off), blinds (half/full), ventilation and air conditioning units and even the gas valve from their mobile phone or laptop.

Active throughout Korea

Since its formation in 2007, the eight-person team at Dana Corp. has been implementing KNX projects for single family homes, luxury villas and commercial premises. It covers all services connected with KNX building system technology: consultancy, support for design and installation, project design, import of components, construction of distribution boxes, programming, commissioning and customer service.

Benefits provided by KNX in this project

- A large selection of switch ranges and uniform design of KNX operating units such as switches, dimmers, temperature controls, blind switches and other installation elements such as sockets, communication connectors etc.
- Central operation via LCD touch panel and remote access via mobile phone and laptop.

Technical refinements

- The interface between KNX and a local RS-485 Home Network System is unique for Korea. This means that KNX functions for lighting, blind system, air conditioning units and heating can be operated and controlled from one unit.

Companies involved

Building owner:
Mega Mark, Seoul
Architect:
Highlife, Seoul
Services Engineers:
Mega Mark, Seoul
HLK Installer:
Samil ENG, Janghang
KNX System Integrator:
Dana Corp., Seoul,
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Comfortable operation of KNX functions by a central touch panel: for example, menus for heating, curtains and lighting.