



Case study

Ningbo Park Hyatt

Location
Philips Lighting

Ningbo, China
Philips Dynalite Control System

PHILIPS

Background

From the moment a guest arrives at the Park Hyatt Resort and Spa in Ningbo, they are made to feel special. The hotel complex, beautifully located on the banks of the Dong Qian Lake in Zhejiang Province, has been designed as a spa retreat with a world-class suite of treatment rooms, offering a combination of Chinese and Western wellness therapies.

The sense of luxury permeates throughout the hotel, from the reception and public areas to the guestrooms themselves. A great deal of the opulent atmosphere experienced by guests has been achieved through the use of a Philips Dynalite control system, which quite literally sets the scene for a relaxing stay at the Ningbo Park Hyatt.

On arrival, guests are welcomed in the reception area with an ambience that perfectly suits the time of day and season of the year. Different lighting scenes have been programmed for daytime, evening and night, with a built-in astronomical timeclock tracking sunrise and sunset times throughout the year and adjusting the settings accordingly. The HVAC presets are similarly regulated to achieve the optimal balance between guest comfort and energy efficiency.

The challenge

The brief was to create an energy-efficient system that is easy for the guests to use, while integrating third-party systems such as the HVAC and curtain controls. Often, the simpler a system appears to the end-user, the more involved the design needs to be to achieve that effect.

The design criteria for the lighting and automation control system encompass the concepts of comfort, ease of control, flexibility and energy efficiency. The control system needed to be intuitive enough to allow guests to be able to instinctively understand how to operate the lights, the curtains and the heating/cooling system within the room. The control platform needed to be designed to integrate these systems into a single self-explanatory user interface,

while also offering strategies to reduce energy consumption. Additionally, it was an important consideration for the Park Hyatt chain that the solution provider was able to offer exemplary service to provide ongoing peace of mind.

The solution

The Philips Dynalite control system was adopted to manage lighting, heating and curtain/blind controls across all three floors of the 100,000 square-meter area, throughout the public areas of the hotel and in each of the 236 guestrooms.

The guestroom functionality is based around Philips' rugged and versatile Dynalite DDMC802 Multipurpose Controller, which permits control of the many lighting circuits, the curtains and the HVAC system. Control for each room is effectively split between the main room and the ensuite, with DR2P user interfaces allowing guests to choose between high, medium and low light settings for each area.

The 'High' setting is ideally suited to a range of activities, with the right amount of light provided for the tasks at hand. Under this preset, the light levels around the main mirror are increased to facilitate dressing and this setting also delivers the perfect environment for business activities. By comparison, the 'Low' setting transforms the room to a more relaxed and romantic atmosphere – also perfect for watching movies – with the reading lamps adjustable for brightness to suit individual guest preferences. The independent 'Low' setting in the bathroom creates the ideal mood for a tranquil stress-dissolving spa.

Turning the lights off to go to sleep is simply achieved through the press of a single button. A 'Do Not Disturb' option prevents the bell from ringing to ensure guests have the best possible uninterrupted rest. During the night, an 'Evening' setting ensures there is no need to disturb other room occupants by turning on the main lights if a guest needs the bathroom. A low-level detector senses that a person is out of bed and automatically activates a subdued lighting pathway to the bathroom.





Fast facts

Hotel Management Group

Park Hyatt

Location

Ningbo, China

Property Developer

Ying Tai

Lighting Designer

Laurence Lee from Light Source

Products

Dynalite DDMC802 Multipurpose Controller; Dynalite DR2P user interfaces, DUS804C Multifunction Sensor; Dyalite peer-to-peer serial bus network, DyNet Dynalite DLight II commissioning software

After a refreshing night's sleep, a single button press is all that is needed to start the new day. Once the curtains are opened, the lighting will automatically dim down to save energy. Moreover, when the guest leaves the room for the day, the curtains will close automatically to help stabilize the temperature, while the lights are turned off and the heating/cooling settings minimized to reduce unnecessary energy expenditure. Here, Philips has worked extensively with French curtain motor manufacturer, Somfy, to achieve seamless integration between lighting and curtain controls.

Daylight harvesting strategies have been used throughout the public areas of the hotel as well as in the guestrooms. Light-level sensors detect increases in natural light levels and correspondingly dim the lighting circuits to maintain predetermined lux levels. When guests enter the room and press the 'on' button, the light level is determined by the time of the day. For example, at noon when it is brighter, the level will automatically set to a low level, whereas in the evening it will default to a high level.

From the guests' perspective, light levels remain consistent regardless of the weather and time of day, adding to their comfort. From the hotel's standpoint, this means that energy is not being used unnecessarily where it is not needed.

Equally, integration between the Philips Dynalite control platform, the HVAC and the motorized curtains/blinds means that settings can be optimized to reduce energy use for unoccupied areas, while maximizing guest comfort.

The entire control system comprises two networks – one for the guestrooms and one for the public areas – connected through Philips Dynalite's sophisticated peer-to-peer communications serial bus network, DyNet. In total, 2000 channels have been used in the public areas, and between 12 and 23 channels for each of the 236 guestrooms, depending on their size.

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Benefits

The Ningbo Park Hyatt is a landmark project for Philips, as it is the first hotel project in China in which the Philips Dynalite control system has been used to control guest rooms.

Past projects have shown that using a Dynalite control platform for lighting alone can save 30 per cent off typical lighting costs. With additional HVAC integration, these savings can be as high as 50 or even 60 per cent.

Park Hyatt wanted a tailored solution to meet its very specific criteria. Not many companies are able to achieve the combination of simplicity, flexibility, comfort and energy savings that Philips delivered for the Ningbo hotel. The great success of this project has thrown the doors open for similar Philips solutions to be used in a number of other Park Hyatt projects currently on the horizon.



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