

The grand ballroom at the Four Seasons Hotel Kuala Lumpur set up for an education seminar

FUNCTIONAL FLEXIBILITY

## Hurrairah bin Sohail

speaks with integrator Systems Electronics & Engineering and consultant ihD about the AV systems designed and deployed for the grand ballroom at the Four Seasons Hotel Kuala Lumpur, Malaysia. he Four Seasons Hotel Kuala Lumpur is the latest addition to the hospitality market in the capital city of Malaysia. Located in the bustling centre of the city, the hotel seeks to provide a range of facilities, from accommodation

to luxury dining experiences. Consultant ihD was appointed to design the appropriate AV systems for the Four Seasons Hotel Kuala Lumpur while Systems Electronics & Engineering [SENE] was tasked with the responsibility of deploying, testing and commissioning them. Work on the project began in May 2017 and was completed in July 2018.

Lim Min Yaw, engineered solutions and operations manager at SENE, says: "For this project, the consultant specified and designed the whole system and selected the equipment. All the decisions were made based on the clients' requirements. Our job was to make sure that the specifications were followed and that the AV systems worked and functioned as intended."

Adrian Lim, senior consultant at ihD, talks about the scope of the

project: "Four Seasons, as an international hotel chain and brand, had a set of requirements and a set of standards that the deployed technology had to meet. We have worked for multiple Four Seasons projects in Asia Pacific and we are familiar with Four Seasons' requirements. The Four Seasons Seoul which we worked on previously was used as a general guideline for this and the requirements were based on an 'unspoken' Four Seasons design standard."

The grand ballroom is the main area which required AV systems. Min Yaw talks about how the hotel intended to use the space: "The grand ballroom comprises three sections. Each section can operate individually, or they can all be combined into one big space. This is made possible with the help of movable partitions. So, the grand ballroom is really flexible in how it can be used by the hotel."

Each of the smaller spaces has been provided with a Panasonic 12,000 lumens projector along with a 250-in Remaco projection screen. These projectors provide visuals when the spaces are being used individually and they have been installed in an orientation that was logical with regards to the space.

When the grand ballroom is being used as one large space, a Panasonic 20,000 lumens brightness projector is called into action. Visuals are projected onto a 350-in Remaco projection screen.

Finding a spot to install this projector was a challenge as Min Yaw details: "During the course of the project, we learnt that there was a big chandelier hanging in the middle of the ballroom and this had an impact on where the Panasonic projector could be mounted. Finding an installation spot where the projection would not be obstructed was a challenge. After surveying the site, we found there was a small gap in the design of the chandelier, and we designed the projector lift to be small enough to fit there. We worked together with the interior design contractors and the M&E contractors to figure out the technical details and we were able to come up with a working solution."

To be mindful of the aesthetics of the grand ballroom, all video systems in the grand ballroom disappear when not in use and Being flexible allows the spaces at Four Seasons Hotel Kuala Lumpur to be suited for a variety of events and functions



Four Seasons Hotel Kuala Lumpur was very particular regarding the final outlook of the space. We really had to focus on every detail during the installation of the technology.

Lim Min Yaw, Systems Electronics & Engineering

## **Tech-Spec**

Video Crestron DM-MD 64 x 64 matrix. HDMI plates receivers transmitters Panasonic 20000 lumens brightness. 12,000 lumens brightness projectors Remaco 350-in,

250-in motorised

Apple iPads Lighting

projection screens Projector lifts Audio

Allen & Heath QU16, QU32 mixers

wireless microphone system Symetrix DSP QSC AD-C1200 ceiling speakers, amplifiers Control

Shure SLX

Crestron control **Philips Selecon** 

lights Strand Lighting 250ML lighting console

Min Yaw says: "All projection screens are motorised, and all the projectors have been installed in projector lifts. When the video system is not being used, the video equipment can just be recessed into the ceiling."

Video signals are distributed through a Crestron DM-MD 64 x 64 along with transmitters and receivers to carry the signal over Cat6a cabling. The Crestron matrix handles all scaling duties for the video system as well.

Lim from ihD says: "We considered video over IP for the Four Seasons Hotel Kuala Lumpur. The Four Seasons Seoul is using HDBaseT and video over IP would be a natural next step. But the design for the Four Seasons Hotel Kuala Lumpur was done approximately five years ago. At that point in time, video over IP was very new. We opted for stability and reliability choosing to go with the tried and tested traditional video matrix."

Crestron HDMI plates can be found across the ballroom allowing users to connect to the video system in the grand ballroom.

Audio in the grand ballroom is provided by QSC AD-C1200 ceiling mounted 12-in speakers powered by QSC amplifiers. A Symterix DSP is used to manage the audio system. The design and specification of the audio system was done by the consultant, ihD.

Lim from ihD says: "The trend with modern hotel ballrooms is to keep the audio system simple, most of the times comprising basic ceiling speakers. In general, hotels are not looking for front of house speakers, steerable speakers or line arrays because such equipment represents a significant investment and also

comes at the cost of flexibility for the ballroom."

Lim delves into the design of the system: "We always use EASE modelling when we do our audio designs. Hotel ballrooms are always challenging spaces because of reverberation and because as AV consultants we do not have control over the materials which will be used in the ballroom. We were lucky that the interior designer went with carpets and not reflective material which made our job a little easier."

Regarding the audio system deployed, Lim says: "Because the grand ballroom is modular, the type of events held there are varied and different. For this reason, the client requested for basic audio provisions so that the events can bring in and use the audio solutions they prefer."

Patch points for audio, video and lighting can be found across the grand ballroom as well as the pre-function area. Allen & Heath QU16 and QU32 mixers are used to manage audio inputs and outputs.

Shure SLX wireless microphone systems have been provided for audio input. Lim says: "The microphone system models that we provided were impacted by the wireless frequency spectrum changes in Malaysia in 2018. However, Shure was great in sorting out all issues. We just changed the models for the ones which were compliant with the new regulations."

Dante is used for audio transmission throughout the public area. Min Yaw says: "Dante allows us to have the flexibility for zoning and sending different types of music to separate spaces."

Control for the grand ballroom at the Four Seasons is provided by a Crestron control processor.

Apple iPads serve as the input devices.

Lim says: "Control systems for the ballroom at the Four Seasons had to be very specific. There is a touch screen provided for each of the three partitions and this allows them to control the lighting and the AV systems as well."

Lighting in the grand ballroom is provided by Philips Selecon lights and controlled by a Strand Lighting 250ML lighting console.

Looking back at the project, Min Yaw narrates: "There were two main challenges that we faced as integrators for the Four Seasons Hotel Kuala Lumpur project. The first was about coordinating the work. There were a lot of contractors and parties working on the project and we all had to make sure that we worked together towards the same goal. The second was regarding the aesthetics. Being a five-star hotel, the Four Seasons Hotel Kuala Lumpur was very particular regarding the final outlook of the space. We really had to focus on every detail during the installation of the technology and liaised with the interior designer to make sure that the final product was something that met the standards of the client."

Lim from ihD gives his opinion: "The grand ballroom functions exactly according to the Four Seasons' requirements. But there are some technology innovations and new products we might suggest. Dante AV can be an option. We are already using Dante for audio signal transmission and it would be interesting to see how it performs for video signal transmission and whether it can make an impact on installations."