### Extron



# Extron 4K AV Switching, Distribution, and Control Serve Up Multimedia at Neptune's Restaurant Hong Kong

"We were definitely confident that our Extron solution would provide a stable guest experience and make system maintenance and operation easier. The AV system fully satisfied the client's expectations in terms of video and audio quality, flexibility, and intuitive operation."

Marco Tang Sales Director BAP Technology Consultants, Ltd., Hong Kong

### Challenge

When it comes to attracting attention, it's hard to compete with a 43-foot-wide (13-M) floor-to-ceiling aquarium teeming with 5,000 colorful sea creatures an arm's length away from diners indulging in gourmet dishes prepared by a Michelin-starred chef. But Neptune's Restaurant at the Ocean Park oceanarium and amusement park complex in Hong Kong's Southern district pulled it off with help from AV integrator BAP Technology Consultants, Ltd., Hong Kong, and Extron.

The restaurant is divisible into large and small areas to host anything from corporate gatherings to intimate dinner parties. Sophisticated multimedia enhances all of these events. BAP designed and installed a flexible yet simple AV solution with automated audio and video processing and distribution, controlled from an intuitive custom touchscreen graphical interface that non-technical people can operate with confidence.

#### Solution

An Extron DTP CrossPoint 86 4K 8x6 Scaling Presentation Matrix Switcher and DMP 128 Plus C AT ProDSP Processors with Dante handle video and audio processing and distribution for all the dining and presentation spaces.



In the main dining room, guests are treated to stunning 4K video and immersive sound provided by three laser projectors and an array of ceiling speakers and subwoofers located throughout the seating area and on the room's performance stage.





Custom designed control GUI can be accessed at the reception desk via a TouchLink Pro touchpanel or WiFi-connected iPads to control the AV system and room lighting.

# Video Distribution to Indoor Venues and Outdoor Signage

The matrix switcher distributes video from diverse sources, including a PTZ camera, Blu-ray players, laptops, and USB memory sticks to laser projectors and flat panel displays in interior meeting, dining, and service areas, as well as outdoor video signage. The switcher's Vector 4K scaling engine matches its output to the native resolution of the displays, optimizing image quality in each venue. DTP shielded twisted pair cables route video into and out of the switcher over long distances. Augmenting the switcher's HDMI and DTP inputs and outputs are DTP transmitters and receivers to extend HDMI and USB signals, including DTP HDMI 4K 330 Tx and RX transmitters and receivers, a DTP HD DA4 4K 330 Distribution Amplifier, and USB Extender Plus T and R HID transmitters and receivers.

### Audio Optimized for Every Room

The DMP 128 Plus ProDSP Processors distribute audio via Dante networking and tailor the sound in each room with digital signal processing functions that include mixing, equalization, tone control, and acoustic echo cancellation. Describing the versatility of the audio system, BAP's Sales Director Marco Tang points out, "With the fully networked audio system, combining and dividing rooms is simple and efficient, with all inputs and outputs automatically assigned in pre-set states. Microphones can be assigned to any partition space freely and easily to accommodate event bookings." Multiple Extron XPA U 1002-70V amplifiers drive ceiling speakers in the expansive restaurant seating area and two intimate VIP dining rooms, providing clear sound at just the right volume for both settings.

# Intuitive and Versatile System Control for Easy Event Setup

IPCP Pro 555 and IPL Pro CR88 IP Link Pro control processors regulate operation of the matrix switcher, the audio processors, Blu-ray players, displays and projectors, screen raise and lower, and even the mood lighting. A TLP Pro 725T 7" TouchLink Pro touchpanel located at the reception desk is the primary user interface where staff can configure all functions through a thoughtfully designed custom GUI that automates many tasks. The LinkLicense for User Interface upgrade on IPCP Pro Series control processors provides a means for the control GUI to be run on WiFi-connected iPads. Extron's Control App is used on the iPad's so that any room's AV system configuration can be controlled from within the room. According to Finson Lam, Director of Engineering at BAP, "Our control system programmer spent much effort to understand the client's operational requirements and workflows and created a solution that allows control everywhere with the touch of a button. This drastically reduces the restaurant's labor costs and turn-around times when setting up the venue for each new event."



VIP Room 1 displays 4K video on a flat panel display. Audio comes through ceiling speakers fed by an XPA 1002-70V amplifier. VIP Room 2, shown in the photo at the top of this story, displays video from a 4K laser projector on a 77" motorized screen.



At the restaurant's entrance, a 46" LED outdoor signage display entices diners with previews of the chef's creations awaiting inside. The display receives HDMI video from the matrix switcher via DTP twisted pair cables that carry the signal over the extended distance from the AV equipment rack located inside the building to this exterior location.

#### Result

Regarding the choice to go with Extron, BAP's Tang says: "We were definitely confident that our Extron solution would provide a stable guest experience and make system maintenance and operation easier. The TouchLink Pro touchpanel provides intuitive control of venue partitioning, signal source selection, screen raise and lower, mood lighting adjustment, audio level adjustment, and display power. For combined usage of the space, a simple button press reconfigures the AV system to send signals to designated areas." Elaborating on the flexibility of the system, Tang notes, "The Extron matrix switcher was selected for its capability to fulfill important application and performance requirements, such as HDMI and DTP inputs and outputs that support 4K video over short and long cable runs. For audio, the Extron ProDSP Processor and Dante networking makes combining and dividing rooms simple and efficient, with all inputs and outputs automatically assigned in pre-set states." Summarizing, Tang observes, "The AV system fully satisfied the client's expectations in terms of video and audio quality, flexibility, and intuitive operation. Importantly, non-technical restaurant personnel are able to manipulate the system to change room layouts as well as operate AV and lighting systems via the user-friendly touch panel controls."

#### WORLDWIDE SALES OFFICES

Anaheim • Raleigh • Silicon Valley • Dallas • New York • Washington, DC • Toronto • Mexico City • Paris • London Frankfurt • Madrid • Stockholm • Amersfoort • Moscow • Dubai • Johannesburg • Tel Aviv • Sydney • Melbourne

Bangalore • Mumbai • New Delhi • Singapore • Seoul • Shanghai • Beijing • Hong Kong • Tokyo