



## Extron XTP and Pro Series Control Help NCSOFT Deliver the Games the World Plays

“The Extron XTP Systems and Pro Series control products provide all that is needed for this multiplayer online game developer and international leader in the video game industry.”

**Denis Park**  
Director  
YOUNGJUN TNC

### Challenges

NCSOFT® is an international leader in the multiplayer online gaming industry. As an e-game developer, video is one of the most important aspects of their business. The AV systems at their corporate headquarters in the affluent Bundang district of Seoul, South Korea, were aging. They needed to be upgraded to keep pace with the high-performance scene switching and color depths integral to advanced game development and presentation.

The project included the auditorium and the convention hall. These rooms are used for a wide variety of activities, such as stockholder meetings, conferences, live performances, and new video game testing and exhibition. The installation would support HDMI and SDI signals with 4K/60 routing and include an integrated control system. Expandability and absolute reliability with built-in system redundancy were mandatory. Also, there needed to be a clear AV upgrade path.

YOUNGJUN TNC worked closely with NCSOFT to design a single AV system with the power to support both rooms. They chose Extron's XTP Systems® operated with Pro Series control products.





The auditorium is used for events such as stockholder meetings, company announcements, and large-screen review of games at various stages of development. Its XTP system provides flexible, high quality signal distribution equally well for business presentations or dynamic game content.

## XTP for Optimal Video Quality and Delivery

NCSOFT's auditorium seats 200 and the convention hall can seat up to 420, depending on the event. At the front of each room is a Basictech LED display system and displays mounted on the side walls augment viewing. Content is sourced from Apple® and Windows® laptops and connected mobile devices. Some events such as gamer conventions also use integrated Sony Pro BRC-H700 high-definition robotic video cameras. For security reasons, each room has its own control room and sources are not shared.

Rack-mounted in the control room is an Extron XTP II CrossPoint 3200 32x32 modular matrix switcher. The XTP® line was chosen for its flexibility, robust integration features, modular frame, and redundant power supplies. The previous AV system took a few seconds to perform switches because of EDID and HDCP communication issues. Technologies built into the XTP II CrossPoint® Series streamline these exchanges. Its 50 Gbps backplane provides the bandwidth for 4K/60 at 4:4:4, as well as the 48 Gbps data rate of 8K video.

## Local and Remote Signal Distribution with Hot-Swappable I/O Matrix Boards

The XTP II CrossPoint matrix switcher is populated with a mix of XTP input and output boards that support local signal distribution as well as extension of AV and control to remote endpoints. XTP II CP HD 4K PLUS HDMI input and output boards and 3G-SDI input boards provide local



The XTP II CrossPoint 3200 matrix switcher is populated with a mix of XTP input and output boards that support local signal distribution and AV, control, and power extension to remote endpoints within the room.

signal distribution, and an XTP CP 4o SA output board routes audio signals to the sound system. To support the endpoints, XTP CP 4K twisted pair I/O boards enable signal extension from the matrix switcher in the control room. They also provide remote powering of the twisted pair transmitters and receivers, reducing need for additional power drops and freeing outlets at the remote locations. While the XTP frame stays in place, the boards can be upgraded as technology evolves. These features and capabilities ensure consistent and reliable display of the vibrant colors and fast switching requirements for dynamic game play.

XTP T HD 4K transmitters extend AV and control signals between the matrix switcher and the sources connected at the lectern. Extron





In addition to the auditorium and convention hall, Extron systems drive large displays and digital signage throughout NCSOFT headquarters.

decorator-style wallplate transmitters provide additional AV connectivity within the hall. An XTP SR HD 4K receiver mounted with each display scales video to the display's native resolution for optimal image quality.

Other Extron signal processing and distribution components consist of Extron DSC 3G-HD A scalars, DA4 12G HD-SDI distribution amplifiers, and DA6 HD 4K HDMI distribution amplifiers. This careful product selection enables the AV system to provide the best possible picture quality, high-performance switching, and flexible signal distribution. XTP fully accommodates system requirements during the most color-saturated and action-packed multiplayer online game demos and exhibitions.

### Extron IP Link Pro Processors and LinkLicense Place System Control in the Palm of Your Hand

The control systems are built with Extron IP Link® Pro processors including the IPL Pro CR88 and the IPCP Pro 550 with the LinkLicense® for User Interfaces upgrade. The eight contact closure inputs and eight relays on the IPL Pro CR88 are used to control screens and the environment, such as lighting. Extron LinkLicense for User Interfaces

extends the graphical interface to an NCSOFT-authorized Apple iPad 10 or iPad Pro 12.9 running the Extron Control app. The processors translate user selections into commands for the XTP II CrossPoint matrix switcher, displays, and other AV hardware. YOUNGJUN TNC appreciated that the app loaded the custom user interface automatically, saving setup time and costs. NCSOFT is currently investigating use of iOS VoiceOver with the Extron Control app to easily convert text to speech for touch-free activation of buttons and commands.

### Results

NCSOFT staff and visitors alike are happy and impressed with the presentation capabilities in the auditorium and the convention hall. "Based on our long experience in the AV industry, we were confident proposing Extron products to NCSOFT for their international headquarters," says Kim Jin Kook, Deputy Head DIF department at YOUNGJUN TNC. "We have been integrating Extron solutions for many years and have come to trust the quality and reliability of the products and the excellent support provided before, during, and even after the project is complete."

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