

PARTNER STORY

LIVE ENTERTAINMENT



OPPORTUNITY

The outdoor performance venue at Mungyeon Provincial Park required a world-class audio system capable of delivering clear, intelligible for open-air performances and other events.



SOLUTION

Mungyeon Provincial Park hired TechDataPS and ARNION to completely overhaul the stage with a state-of-the-art HARMAN Professional Solutions audio system and all-new rigging.

“

To deliver exceptional sound reinforcement, TechDataPS and ARNION designed a state-of-the-art JBL line array system featuring VTX A8 loudspeakers and VTX B18 subwoofers.”

MUNGYEONG SAEJAE PROVINCIAL PARK, SOUTH KOREA

Mungyeong Saejae, a mountain pass located 642 meters above sea level on Mount Joryeong, is one of the oldest surviving parts of an ancient road that once connected Seoul and Busan. Three fortified stone gates dating from the Joseon dynasty still stand at the site, making it a culturally significant landmark. Declared an official provincial park in 1981, Mungyeong Saejae is now a major tourist destination featuring hiking trails, a sculpture garden and a stage for open-air performances and other events. With the venue's sound system in dire need of an upgrade, park officials hired TechDataPS and ARNION to completely overhaul the stage with a state-of-the-art HARMAN Professional Solutions audio system and all-new rigging. To equip the venue for a variety of events, TechDataPS and ARNION selected class-leading JBL line array loudspeakers, Crown amplifiers, Soundcraft digital mixers, AKG microphones and BSS direct boxes.

“The client wanted us to replace the existing sound system, as well as the supporting infrastructure for it,” said Seok Oh, Kang, Sales Representative, TechDataPS Co., Ltd. “First and foremost, a high-quality audio system was required to cover multi-purpose outdoor events and performances. Secondly, the client requested an infrastructure with sufficient inputs and outputs for any situation. To meet these requests, we chose to go with the latest and most dynamic JBL VTX A8 systems, which are highly revered for their performance. The quantity and angle of the speakers were determined in the design stage through acoustical simulation.”

To deliver exceptional sound reinforcement at Mungyeong Provincial Park, TechDataPS and ARNION designed a state-of-the-art JBL line array system featuring VTX A8 loudspeakers and VTX B18 subwoofers. The A8 offers JBL Professional's flagship VTX A Series technology in a compact solution for small to mid-size rental and installed applications. With two 8-inch woofers, four 3.5-inch midrange drivers and two 2-inch high-frequency drivers, the A8 delivers world-class sound in a low-profile cabinet. The B18 subwoofers add additional low-frequency support to the line arrays, with powerful



AKG

AMX

BSS



dbx



lexicon

Martin

Soundcraft

STUDER



“

The client wanted us to replace the existing sound system, as well as the supporting infrastructure for it. First and foremost, a high-quality audio system was required to cover multi-purpose outdoor events and performances. Secondly, the client requested an infrastructure with sufficient inputs and outputs for any situation. To meet these requests, we chose to go with the latest and most dynamic JBL VTX A8 systems, which are highly revered for their performance.”

18-inch Differential Drive woofers and patented Slip Stream ports to improve airflow and reduce audible turbulence.

JBL AM7215/26-WRC two-way loudspeakers provide broad, 90- by 50-degree coverage in front of the stage, and feature weather-resistant construction to survive the elements. JBL Control HST paging loudspeakers were installed to provide extremely broad, hemispherical coverage for communication and all-purpose broadcasting. JBL Line Array Calculator and Performance Manager software allowed the integrators to calculate the ideal speaker placement and angles for the venue.

To power the system, TechDataPS and ARNION selected Crown I-Tech 4x3500HD, I-Tech 9000HD and CDi DriveCore 4|1200 power amplifiers. I-Tech Series amplifiers feature onboard OMNIDRIVE HD processing, including the acclaimed LevelMAX limiter suite and support for linear phase FIR filters as used in the latest JBL V5 loudspeaker tunings. The four-channel CDi DriveCore 4|1200 represents a powerful and cost-effective solution for additional amplification at the park, powering the JBL Control HST paging speakers.

To capture clear, detailed sound on stage, the venue at Mungyeong Saejae is equipped with a range of AKG microphones. The seven-piece AKG Drum Set Concert 1 professional drum microphone kit includes the D112, D40 and C430 microphones, ideal for capturing drum sets with power and clarity. AKG PZM30D boundary microphones provide additional sound reinforcement, capturing a natural sound without reflections from the walls of the bandshell. BSS AR-133 active DI boxes allow instruments such as guitars and keyboards to be easily amplified with pure tone and clarity.

To facilitate world-class sound reinforcement and ease of operation, TechDataPS and ARNION outfitted the venue with Soundcraft Vi2000 and Vi1000 digital mixing consoles. With a Soundcraft SpiderCore integrated DSP and I/O engine based on STUDER technology, the Vi2000 and Vi1000 can handle events of any size and complexity. A unique, hands-on Vistonics interface with color-coded Faderglow technology make mixing intuitive and streamlined for any operator. Soundcraft ViSB 64:32 MO-Vi stageboxes provide plenty of microphone inputs on stage for large events.

“Mungyeong Saejae Provincial Park is an admirable cultural hub that truly represents the city,” said Man Jin Kim, Audio Director, Mungyeong Saejae Provincial Park. “As a result, our expectations for the sound system upgrades were set exceptionally high. The new systems had to deliver world-class sound for all events, and the design had to ensure maximum ease of use for the operators. Having said that, we are very happy with the cutting-edge solutions delivered to us by TechDataPS.”



“

Our expectations for the sound system upgrades were set exceptionally high. Having said that, we are very happy with the cutting-edge solutions delivered to us by TechDataPS.”



CONTACT

For PR Inquiries:

David Glaubke

Director, Public Relations

HARMAN Professional Solutions

david.glaubke@harman.com

+1 (818) 895-3464 Office

+1 (818) 470-7322 Mobile

FOR APAC

RV Ramachandran

Marketing Director - Asia Pacific

HARMAN Professional Solutions

108 Pasir Panjang Road

#02-08 Golden Agri Plaza

Singapore 118535

TEL No: +65-6870-5000

DID No: +65-6870-5092

Mobile: +65-9146-2464

Email: RV.Ramachandran@harman.com

PRODUCTS USED

AKG DRUM SET CONCERT 1 PROFESSIONAL DRUM MICROPHONE KIT

AKG PZM30 D BOUNDARY MICROPHONES

BSS AR-133 ACTIVE DI BOXES

CROWN CDI DRIVECORE 4|1200 POWER AMPLIFIERS

CROWN I-TECH 4X3500HD POWER AMPLIFIERS

CROWN I-TECH 9000HD POWER AMPLIFIERS

JBL AM7215/26-WRC LOUDSPEAKERS

JBL CONTROL HST PAGING LOUDSPEAKERS

JBL LINE ARRAY CALCULATOR SOFTWARE

JBL PERFORMANCE MANAGER SOFTWARE

JBL VTX A8 LINE ARRAY LOUDSPEAKERS

JBL VTX B18 SUBWOOFERS

SOUNDCRAFT VI1000 DIGITAL MIXING CONSOLE

SOUNDCRAFT VI2000 DIGITAL MIXING CONSOLE

SOUNDCRAFT VISB 64:32 MO-VI STAGEBOXES

ABOUT HARMAN

HARMAN (harman.com) designs and engineers connected products and solutions for automakers, consumers, and enterprises worldwide, including connected car systems, audio and visual products, enterprise automation solutions; and services supporting the Internet of Things. With leading brands including AKG®, Harman Kardon®, Infinity®, JBL®, Lexicon®, Mark Levinson® and Revel®, HARMAN is admired by audiophiles, musicians and the entertainment venues where they perform around the world. More than 50 million automobiles on the road today are equipped with HARMAN audio and connected car systems. Our software services power billions of mobile devices and systems that are connected, integrated and secure across all platforms, from work and home to car and mobile. HARMAN has a workforce of approximately 30,000 people across the Americas, Europe, and Asia. In March 2017, HARMAN became a wholly-owned subsidiary of Samsung Electronics Co., Ltd.



© 2020 HARMAN International Industries, Incorporated. All rights reserved. Harman Kardon, Infinity, JBL, Lexicon and Mark Levinson are trademarks of HARMAN International Industries, Incorporated, registered in the United States and/or other countries. AKG is a trademark of AKG Acoustics GmbH, registered in the United States and/or other countries. Features, specifications and appearance are subject to change without notice.