

# SDVoE Technology Enables Low-Latency and Seamless Switching for Esports Training at Hongguang University

Established in 1967, Hongguang University of Science and Technology is a private university located in Shalu District, Taichung, Taiwan. Hongguang University offers a myriad of undergraduate and graduate programs in the fields of business, engineering, humanities, science and social sciences. Originally established as Hongguang Junior College of Nursing, the college expanded to a university in response to the trend of education reform at home and abroad, the advent of the era of informatization and technology, and the trend of globalization and internationalization of economic and trade development.

Hongguang University's Department of Multimedia Game Development and Application was established to meet the increasing demand of technologists in multimedia-related industries. Digital content industry has been one of the major focuses in the region. As a result, Hongguang University's Department of Multimedia Game Development and Application cultivates technologists skilled in digital games, computer animation, network multimedia, and digital audio-visual applications.

## Challenge

Hongguang University's Department of Multimedia Game Development and Application includes two esports classrooms, including a terminal game esports training center and a mobile game esports training center, which are located adjacent to the information building on campus. Hongguang University's Department of Multimedia Game Development and Application required a solution that enabled video distribution across multiple locations, including the two training sites and the information building. It was essential for Hongguang University's Department of Multimedia Game Development and Application to provide a solution with zero-latency to enable coaches to easily switch sources and view the status of each player in real-time.

Specifically, the solution needed to address the requirement for audiovisual signal distribution for all players in the terminal game esports training center and a mobile game esports training center. Additionally, Hongguang University's Department of Multimedia Game Development and Application required a solution to integrate and distribute player signal sources to monitors in different spaces for coaches to switch and monitor.



Click here to view a video of this solution in action



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## Solution

Wavesplitter provided a solution utilizing 10G AV-over-IP distribution, powered by SDVoE technology, which can easily complete various complex audiovisual tasks. With zero-delay and seamless switching, Wavesplitter's WST-PIP001 provided coaches with instant access to the training status of all players, regardless of the location on Hongguang University's campus. The WST-PIP001 is designed for high-quality installations that require audiovisual extensions with minimum latency through IP transmissions. With an ultra-light compression scheme (lossless for most content), 4K audio and video streams (HDMI or DisplayPort) can be transmitted simultaneously in under 0.1 milliseconds.

Additionally, Wavesplitter's SDVoE-enabled technology provided a complete API control system, which can be controlled through mobile phones or tablets, and controlled and set through web applications, so there will be no operating system compatibility issues. In the same network domain, multiple customized mode combinations such as TV wall, matrix, and multi-window division can be made at the same time, and the screen can also be previewed in real time, which is convenient for the coach to select the screen to be displayed and switch in real time.

SDVoE technology, as implemented through Wavesplitter's WST-PIP001, allowed for full high-quality, simplified control across all displays throughout Hongguang University's campus to enable coaches to quickly and easily visualize the terminal game esports training center and a mobile game esports training center.

## Benefits of SDVoE Technology

SDVoE reaches beyond existing standards to provide benefits no other technology can claim:

- A complete ecosystem – SDVoE Alliance members are manufacturers with expertise in signal distribution, display manufacture, IT infrastructure, chip design, and AV software. The integrator has dozens of partners to align with and products to choose from.
- A flexible yet simple software platform – the SDVoE API allows rapid development of highly specialized software, custom-tailored to the needs of a vast array of end users.
- A full OSI stack solution – only SDVoE offers the simplicity of a complete top to bottom solution, fully encompassing infrastructure, transport, processing, and a simple control layer.

For more information on the SDVoE Alliance, please visit [www.sdvoe.org](http://www.sdvoe.org).  
Keep up with the latest news from the SDVoE Alliance on LinkedIn, Twitter and YouTube.