

# Leader

## **TV Osaka chooses Leader Test and Measurement for its first all-IP TV Station**

TV Osaka, upon relocating to a new building, took a bold step by becoming one of the first broadcasters in Japan to fully transition to an all-IP network. This innovative project includes everything from the master control room to the studio and transmission lines. Leader Electronics' 'True Hybrid' LV5600 waveform monitors and LV7600 rasterizers have been instrumental in supporting the system construction and ensuring smooth, stable live operations.

TV Osaka is an affiliate of Japan's TX Network for the Osaka prefecture and is a sub-key station of the TV Tokyo Corporation Network. TV Osaka broadcasts a variety of programming including live sports, local festivals, travel programs, anime, dramas, news, and science programs for children. We spoke with TV Osaka's Deputy Director of Technical Operations, Mr. Kyohei Yamaguchi, and Technical Officer, Mr. Shinya Kawamura, about the background of the SDI-IP transition and how Leader's test and measurement instruments have been at the core from the start.

## **The Challenge of Full IP Adoption**

TV Osaka began this ambitious project by first deciding to digitize its master control room, then expanding to collaborate with its four affiliated stations (TV Hokkaido, TV Osaka, TV Setouchi, and TVQ Kyushu). Mr. Yamaguchi explained that their goal was to consolidate the previously distributed video matrixes and routers into one unified IP network. This would reduce equipment and cables, ultimately simplifying and increasing operational efficiency.

Additionally, the studio also transitioned to IP to take advantage of the shared resource benefits of IP, aligning with the master control's IP integration.

## **Leader Electronics' Technological Expertise and Support System: The Deciding Factor**

The unprecedented challenge of fully transitioning to IP posed significant hurdles, especially when connecting equipment from various vendors and managing quality during the transition period with both old and new systems in place.

Mr. Yamaguchi pointed out that one of the key challenges during system construction was the urgent need for knowledge about IP technology since their old building was entirely SDI-based. However, Leader had already started supporting IP signals with the LV5600 early on, which provided significant reassurance during this transition.

Mr. Kawamura also noted that prior to installation, the team took part in a seminar, led by one of Leader's IP experts, on IP signal management. This seminar played a crucial role in enhancing the staff's understanding, enabling a smooth transition to the fully IP-based system.

## Use of Leader Electronics Products in Key Sections

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### **Master Control Room: LV7600 Rasterizer**

In the master control system, the LV7600 rasterizer was adopted. The rack-mounted LV7600's GUI operation is conducted via a touch panel screen from the monitoring desk, streamlining operations. Mr. Yamaguchi mentioned that the goal was to standardize operation interfaces and improve visibility by using touch panels.

### **Studio: LV5600 Waveform Monitor**

The LV5600 waveform monitor has been introduced in the studio setup. Mr. Kawamura emphasized that even with the full IP transition, many external devices and transmission lines still use SDI signals. The LV5600, which supports both SDI and IP hybrid inputs, is essential for ensuring quality. He also mentioned that the operational feel of the LV5600 is nearly identical to the previous Leader Electronics waveform monitors used in their old facility, allowing video engineers to continue working smoothly in the IP environment. This continuity in user interface design was crucial, as the setup mirrored that of the previous studio system.

### **Hybrid Operations and Problem Solving**

Despite the full IP transition, some SDI devices remain in the studio. The hybrid functionality of the LV5600 has been beneficial in distinguishing between issues in the IP and SDI systems. Mr. Kawamura explained that when noise occurs, the ability to monitor both SDI and IP signals simultaneously with the LV5600 helps quickly identify the cause of the problem.

### **Gratitude for Leader's Ongoing Support and Future Partnership**

Mr. Yamaguchi expressed that the stable operation of Media over IP systems is largely due to the contributions of Leader products. He appreciated that Leader continues to offer support even after the system's implementation, albeit few IP-related issues. The Leader team has been continuing to hold IP training sessions with TV Osaka's engineers, building their technical knowledge greatly. Mr. Yamaguchi highlights that follow-up support regarding the transition from BB reference to PTP reference and IP signal quality management was invaluable.

## **Leader Electronics Corporation**