A New Standard for Live Production Without Format Constraints

Panasonic

Conventional hardware switchers have fixed video formats for each device, and often require format conversion to handle inputs in different formats. In addition, if they do not support IP signals or streaming, dedicated conversion equipment is required. As a result, additional costs and preparation work increase, and rapid responses to sudden needs become difficult. These constraints lead to the issue that desired sources cannot be used, limiting visual expression.

Flexible Input and Output, Free from Format Conversion

KAIROS is a software-based platform with no hardware-like constraints on input/output or internal processing.
It allows ***multiple formats to be mixed and used simultaneously***, eliminates the need for converters for format conversion, and enables flexible connectivity with all types of video equipment. As a result, it enables highly flexible production using diverse video sources, while simplifying system design and setup by reducing format-conversion layers compared with conventional systems. In addition, minimizing conversion equipment reduces system complexity and potential points of failure.

	Conventional Hardware Switchers	KAIROS
Mixed operation of different video formats: resolution, frame rate, color model, bit depth, color gamut, dynamic range	Additional equipment required	✓
Support for non-standard resolutions: custom aspect ratios and custom pixel resolutions	Additional equipment required	✓
Support for a wide variety of signal formats: e.g., IP (ST 2110, NDI® High Bandwidth, streaming), SDI, HDMI	Additional equipment required	✓

✓ Enables mixed use of sources with different video formats*1

With KAIROS, you can directly input sources and graphics in different video formats as they are, without conversion. In addition, it automatically performs optimal internal processing according to the set resolution, allowing multiple outputs at arbitrary resolutions and frame rates without being restricted to predefined formats. Furthermore, it is also possible to composite video sources with different resolutions and aspect ratios to create scenes (MEs).

This enables greater creative flexibility and efficient operation for events and sports that combine multiple LED displays with different or custom resolutions, and for broadcast and eSports streaming that use a large number of video sources.

✓ Enables input and output using various signal formats

Baseband signals such as SDI and HDMI, as well as IP signals including ST 2110, NDI® High Bandwidth, and streaming, can be input and output as they are without conversion. In addition, video, still image, and audio files in different signal formats can be stored internally without conversion and used as sources.

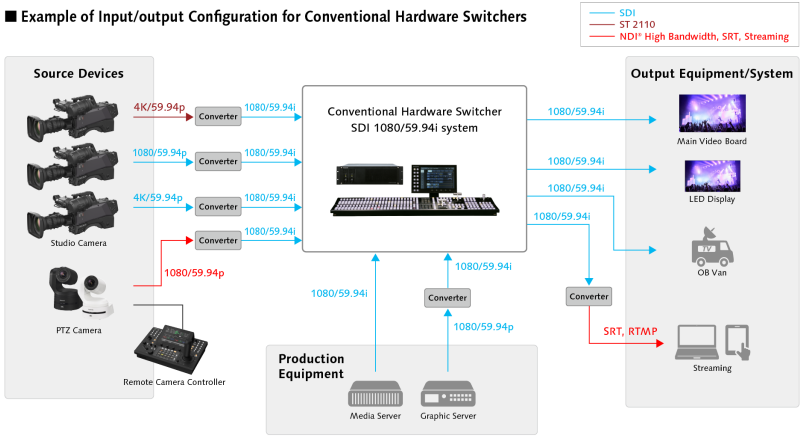
**1: For supported video formats, please refer to https://pro-av.panasonic.net/en/products/it_ip_platform/at-kc200.html#resolution.*

** For specifications, please refer to the https://pro-av.panasonic.net/en/products/it_ip_platform/at-kc2000_spec.html.*

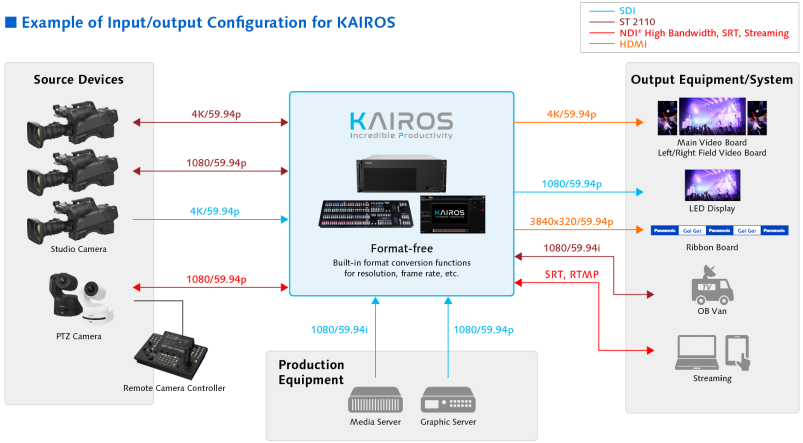
** NDI® is a video connectivity technology and is registered as a trademark by Vizrt NDI AB in the United States and other countries.*

For more information, please visit the website >>> https://pro-av.panasonic.net/en/products/it_ip_platform/

■ **Example of Input/output Configuration for Conventional Hardware Switchers**



■ **Example of Input/output Configuration for KAIROS**



June 2026 | SP-W-KCINOUTENS1