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IT/IP Platform "KAIROS"

Broadcast and Professional AV

KAIROS

Achieving Innovation in Live Video Video Production Platform KAIROS Mainframes Kairos Core 200/2000



Four Models Lineup to Suit the Operating Environment

Middle-range class: Kairos Core 200 (AT-KC200, AT-KC200L1); High-end class: Kairos Core 2000 (AT-KC2000, AT-KC2000S1); users can select a model suitable for their operating environment according to the number of IP/SDI inputs and outputs and storage capacity.

Flexible and Diverse Video Production

Using the GPU for video processing enables multilayer video production with no limit on the number of MEs or keys. What's more, the "Canvas" screen frees video production from resolution and format limits.

Supports Diverse I/O Signals and Multiple Channels

Kairos Core 200/2000 supports a variety of input and output signals, including SDI*1, ST 2110, NDI* High Bandwidth, and SRT. Its also support ST 2022-7 redundancy, which duplicates the network for operational reliability. Redundancy without halving the number of inputs; the AT-KC2000S1 also does not halve both of inputs and outputs.*1 Furthermore, Smart Routing Inputs*2 allow the input sources of external routers to be deployed and operated as virtual inputs on KAIROS, enabling operation beyond the maximum number of inputs.

*1: Requires Kairos Software Version 1.6 or later. *2: Requires Kairos Software Version 1.7 (to be released in FY2024 Q2) or later.

AT-KC200 AT-KC200L1 Kairos Core 200

(Main Frame)



AT-KC2000 AT-KC2000S1Kairos Core 2000

(Main Frame)



[•] NDI® is a registered trademark of Vizrt NDI AB in the United States and other countries.

Next Gen KAIROS for Extra-innovative Live-video Production

New Midrange KAIROS with Increased **Functionality and Performance**

AT-KC200/KC200L1

Kairos Core 200 (Main Frame)



High-end KAIROS for Next-gen Live-video **Production Featuring Unmatched Performance Like Never Before**

AT-KC2000/KC2000S1

Kairos Core 2000 (Main Frame)



Diverse and Flexible Inputs/Outputs

All 4 models: Agile I/O Routing for flexible allocation of IP input and output according to bandwidth, and Smart Routing*1 that allows virtual deployment of input sources to external routers on KAIROS. AT-KC2000S1: The number of IP inputs is double that of the AT-KC200/KC2000. And even during redundancy operation, the number of inputs and outputs is not halved. *2

AT-KC200L1: SDI inputs/outputs and NDI® and SRT as standard.*3

Much More Internal Storage

AT-KC200: 1.3x more for the RAM player, 5x more for the clip player, and 9x more for still images (vs. AT-KC100) AT-KC2000: 1.5x more for the RAM player, over 4x more for the clip player, and over 2x more for still images (vs. AT-KC1000)

Improved Reliability and Operability

The new chassis' low-speed fans combine quiet operation with high throughput.

ST 2022-7 network redundancy ensures improved reliability in the event of a network failure, and redundancy is possible without halving the number of inputs. Furthermore, the AT-KC2000S1 has no halving of both the number of inputs and outputs.

Major Specifications

Model Number	AT-KC200L1	AT-KC200	AT-KC2000	AT-KC2000S1	
Power Requirement	AC100-127V/200-240V, 50/60Hz, 10A/5A, Redundant				
Weight	Approx. 17.8 kg / 39.24 lb without accessories & options	Approx. 17 kg / 37.47 lb without accessories & options			
Dimensions (W x H x D)	430 mm x 176 mm x 505 mm / 16-15/16" x 6-15/16" x 19-7/8" (4RU)				
Agile Input Routing	Yes *3	Yes			
Smart Routing Input	Yes *1*3	Yes*1			
HD 1.5G I/O	64 in x 40 out *3	64 in x 40 out *2			
HD 3G I/O	32 in x 40 out *3	32 in x 40 out *2		64 in x 40 out *2	
4K 12G I/O	8 in x 10 out *3	8 in x 10 out *2		16 in x 10 out *2	
ST 2022-7 Redundancy	Yes, Inputs not halved Outputs halved *3	Yes, Inputs not halved Outputs halved *2		Yes, Inputs/outputs not halved *2	
NDI®*4 (HD only)	2 in/2 out, Audio 16 ch	2 in/2 out, Audio 16 ch			
SDI	24 in x 12 out of HD/FHD 12 in x 6 out of 4K	Supported with optional AT-KC20M1 SDI I/O Board*2			
RTP/SRT/RTMP/RTSP	8 in/2 out (only input for RTSP)		16 in/4 out (only input for RTSP)		
RossTalk/NMOS/TSL5.0/AMP	Yes (Only NMOS future supports*3) *5	Yes *5			
RAM Player (uncompressed)	8 ch, 32 GB	8 ch, 32 GB *6	8 ch, 96 GB *6	8 ch, 86 GB *6	
Clip Player (compressed)	2 ch, 400 GB		2 ch, 850 GB		
Still Store	up to 4K, 7 GB		up to 4K, 32 GB		
Audio Player (compressed)	4 ch, 400 GB *7		4 ch, 850 GB *7		
Multiviewer	4 ch, Max. 36 PiP				
CANVAS Function	up to 8K, 32 Megapixels		up to 12K, 66 Megapixels		
PTP Sync Support	Yes				

- *1: Requires software Version 1.7 or later. AT-KC200L1 will support this in the future.
- *2: Requires software Version 1.6 or later.
- *3: ST 2110 input/output requires a separate option to be supported in the future.
- *4: NDI® here means NDI® High bandwidth

AT-SFCM10

Kairos Core Manager

Optional Software

This optional software, which runs on a PC networked to KAIROS, enables intuitive GUI-based operation for backup. media synchronization, data transfer, etc. using multiple Kairos Core units.

- Compatible models: AT-KC200/KC2000/KC2000S1 (software ver. 1.6.2 or later). AT-KC200L1.
- · Operating system requirements: Windows 10 or 11.
- *Kairos Core Manager is free for use with up to two Kairos Core units;
- a licence must be purchased for use with three or more units. Please consult your dealer.

New Options to Expand the KAIROS System

Optional Hardware

AT-KC20M1

SDI I/O Board

SDI (micro BNC) input/output is possible by installing the SDI I/O Board in a slot on the back of the Kairos Core 200/2000 mainframe, enabling 8 inputs/4 outputs and REF In/Out on a single board. One to four cards can be installed in a single Kairos Core to expand the number of SDI inputs and outputs.





Example of installation on AT-KC200

- Compatible models: AT-KC200/KC2000/KC2000S1 (software ver. 1.6 or later), AT-KC200L1.
- Installation on the main frame is carried out by the dealer. Always consult your dealer for installation.
- * When installed, max. capacity of the RAM player is reduced. For details, please check our website.

SDI Inputs and Outputs of Kairos Core 200/2000

		AT-KC200L1	AT-KC200	AT-KC2000	AT-KC2000S1	
	Maximum SDI boards mount	1 unit *	Max. 4 units		Max. 2 units	
	HD/FHD Maximum I/O	32 in x 16 out			16 in x 8 out	
-	4K Maximum I/O		16 in x 8 out		8 in x 4 out	

The AT-KC200L1 supports SDI input/output as standard, but one additional SDI I/O board can be installed.

AT-SFCM10 Kairos Core Manager operation screen

Panasonic Entertainment & Communication Co., Ltd.

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Specifications are subject to change without notice.



For more information please visit Panasonic web site https://pro-av.panasonic.net/en/gr/

*7: Share capacity with clip player. • NDI® is a registered trademark of Vizrt NDI AB in the United States and other countries.

*5: RossTalk and NMOS each require an optional software key.

For details, please check SDI I/O board web page.

*6: Max. RAM capacity is reduced with SDI I/O boards installed.

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