July 2024

# 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, 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. Furthermore, Smart Routing Inputs\* allow the input sources of network switches to be deployed and operated as virtual inputs on KAIROS, enabling operation beyond the maximum number of inputs.

- \* Requires Kairos Software Version 1.7.1. AT-KC200L1 requires an optional NIC card (to be supported in the future).
- NDI® is a registered trademark of Vizrt NDI AB in the United States and other countries.

AT-KC200 AT-KC200L1 Kairos Core 200

(Main Frame)



AT-KC2000 AT-KC2000S1

Kairos Core 2000 (Main Frame)



# 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, which allows virtual handling of video sources input to network switches, up to 64 inputs regardless of video format.

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.

AT-KC200L1: SDI inputs/outputs and NDI® and SRT as standard.\*2

#### 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	176 mm x 505 mm / 16-15/16" x 6-15/16" x 19-7/8" (4RU)		
Agile Input Routing	Yes *2	Yes		
Smart Routing Input	*2	Yes*1		
HD 1.5G I/O	64 in x 40 out *2	64 in x 40 out		
HD 3G I/O	32 in x 40 out *2	32 in x 40 out		64 in x 40 out
4K 12G I/O	8 in x 10 out *2	8 in x 10 out		16 in x 10 out
ST 2022-7 Redundancy	Yes, Inputs not halved Outputs halved *2	Yes, Inputs not halved Outputs halved		Yes, Inputs/outputs not halved
NDI®*3 (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		
RTP/SRT/RTMP/RTSP	8 in/2 out (only input f	or RTSP) 16 in/4 out (only input for RTSP)		y input for RTSP)
RossTalk/NMOS	Yes (Only NMOS future supports*2) *4		Yes *4	
TSL5.0/AMP/SNMP*5		Yes		
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 1.7.1 or later.
- \*2: Optional equipment is required for ST 2110 in/out of the AT-KC200L1, future support.
- \*3: NDI\* here means NDI\* High bandwidth.
- \*4: RossTalk and NMOS each require an optional software key.

- \*5: Requires software Version 1.7.0 or later.
- \*6: Max. RAM capacity is reduced with SDI I/O boards installed. For details, please check SDI I/O board web page.
- \*7: Share capacity with clip player.

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

#### KAIROS Software Extends to Offline\*



#### AT-SFC10

Kairos Creator (GUI Software/Software Key)

Intuitive GUI for easy configuration of inputs/outputs, scenes, layers, etc.

OS: Windows 10/11, macOS Catalina/Big Sur/Monterey



## **Kairos Emulator**

Free software that allows production and training with Kairos Creator in offline environments such as outside the studio or at home.

OS: Windows10/11

\*Requires version 1.7.0 or after.

Some functions can't use on Kairos Emulator.

# 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.

- Compatible models: AT-KC200, AT-KC200L1, AT-KC2000, AT-KC2000S1. 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.

# **Optional Software**

# AT-SFCM10 Kairos Core Manager



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, AT-KC200L1, AT-KC2000, AT-KC2000S1.
- · 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.

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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/

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