

4K60 JPEG2000 AV over IP System Controller

Centralized Matrix Switching, 9x9 Video Wall & KVM Roaming for JPEG2000 AV over IP Systems — Dual-Network Isolation, Web GUI & Dante Management

MPN: AVO-IPCTL-JP2K



1 PRODUCT OVERVIEW

DESIGNED FOR

AV integrators, system designers, and IT managers deploying JPEG2000 AV over IP systems using AVO-IPJP2K encoders and decoders who need centralized matrix switching, video wall, KVM roaming, and Dante management.

THE CHALLENGE

Without a controller, each AVO-IPJP2K encoder/decoder pair operates in point-to-point mode only. Matrix switching, video wall layout, and KVM roaming require manual front-panel configuration per unit — impractical for multi-zone deployments.

THE KANEXPRO ADVANTAGE

The AVO-IPCTL-JP2K transforms the entire JPEG2000 system from point-to-point into a fully managed matrix. One controller handles routing, video wall, KVM, Dante, GPIO, and IT network isolation — accessed from any browser on the network.

2 PRODUCT POSITIONING

AVO-IPCTL-JP2K is the system management hub for integrators who need matrix switching and video wall control in JPEG2000 AV over IP deployments — without a dedicated hardware matrix or video wall processor.

3 SALES ANALYSIS

CHANNEL FIT

Always sold alongside AVO-IPJP2K endpoint pairs. Rep and distribution channel. Direct for large enterprise/campus installs. CEDIA for residential and commercial installs with matrix/video wall requirements.

DEAL SIZE & SALES CYCLE

\$599 per controller. Typically 1 controller per system of 2–80+ endpoints. System deal size: \$2,000–\$50,000+.

COMMON OBJECTIONS

1. “Can’t the encoders/decoders work without it?” — Yes for point-to-point, but matrix switching, video wall, and KVM roaming all require the controller. 2. “What about third-party control systems?” — The controller exposes RS-232, TCP/IP API for Crestron, AMX, QSC. 3. “Is there a software alternative?” — No — the controller provides the hardware Video LAN isolation required for enterprise installs.

WIN / LOSS THEMES

Win: any install with 3+ encoder/decoder pairs, video wall, or KVM roaming. Win: enterprise installs requiring network isolation. Loss: simple 1:1 unicast installations where matrix is not needed.

TOP USE CASES TO CLOSE

- 1 Corporate campus matrix — 10+ encoders, 20+ decoders, drag-and-drop routing + video wall from web GUI. Controller is a mandatory line item on every quote.
- 2 House of worship IMAG + Dante DSP integration — controller manages video routing, KVM for camera operators, and Dante audio assignments from one interface.

4 APPLICATIONS



Matrix Switching

Route any JPEG2000 encoder to any decoder instantly from a web browser. Drag-and-drop routing across unlimited encoders and decoders without physical recabling.



9x9 Video Wall

Configure video walls up to 9x9 with bezel compensation from the web GUI. No dedicated video wall processor required.



KVM Roaming

Move keyboard and mouse control between encoder zones from the web GUI without touching a cable or walking to a rack.



Dante AV-A Management

Configure Dante AV-A audio routing for all licensed JPEG2000 endpoints. Assign audio sources and manage Dante bridges in one interface.



Dual-Network Isolation

VIDEO LAN keeps multicast AV traffic on a separate segment from the IT network. Prevents AV bandwidth from impacting IT and meets enterprise security requirements.



Web GUI System Management

Auto-discover all encoders and decoders at startup. Manage firmware, EDID, IP addressing, user accounts, and GPIO from a single browser — no software to install.

5 WHO THIS IS FOR

AV Integrators

IT Managers

Corporate AV

Education AV

House of Worship

Hospitality AV

System Designers

Ideal User

AV integrator or IT manager quoting a multi-zone JPEG2000 AV over IP system. The controller is a mandatory line item for any deployment requiring matrix switching or video wall.

Project Types

Corporate campus, education, houses of worship, hospitality multi-zone, control rooms, broadcast

Typical Buyer

AV Director, IT Infrastructure Manager, or Facilities Manager. Controller is a system-required accessory — not optional for matrix deployments.

6 KANEXPRO PRODUCT COMPARISON

The AVO-IPCTL-JP2K is sold as a recommended accessory with every multi-endpoint JPEG2000 system. Use this table to guide system-sizing conversations.

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
AVO-IPJP2K	JPEG2000 Full Endpoint	4K60, KVM, ARC, fiber+copper	Primary endpoint — requires controller for matrix mode
AVO-IPJP2KS	JPEG2000 Slim Endpoint	4K60, copper only	Cost-entry endpoint — requires controller for matrix mode
AVO-IPJP2KD	JPEG2000 Dual-LAN Endpoint	Dual 1G, Dante segmentation	Dual-LAN endpoint — requires controller for matrix mode
AVO-IPCTL-265	H.265 System Controller	Controller for H.265 family	Different protocol — not compatible with JPEG2000 endpoints

★ AVO-IPCTL-JP2K is required for matrix switching, video wall, and KVM roaming in all AVO-IPJP2K deployments.

7 FREQUENTLY ASKED QUESTIONS

How many endpoints can the controller manage?

The AVO-IPCTL-JP2K supports up to 762 encoder IDs and 762 decoder IDs on a single system.

Is the controller required for basic operation?

No — point-to-point unicast works without the controller. It is required for matrix switching, video wall (up to 9×9), and KVM roaming.

Can I use a single network switch?

Yes. Connect all encoders, decoders, and the VIDEO LAN port to one switch. Leave CONTROL LAN connected to a PC or IT network. Single-switch mode is supported but IT network isolation is not maintained.

Is the controller compatible with H.265 endpoints?

No — the AVO-IPCTL-JP2K manages JPEG2000 endpoints only. Use AVO-IPCTL-265 for H.265 systems.

How do I access the web GUI?

Navigate to <http://controller.local> or 192.168.6.100 (no DHCP). Default login: admin/admin. You will be prompted to set a new 6-digit password on first login.

Does the controller support third-party control systems?

Yes — RS-232, TCP/IP API, Telnet, and SSH enable integration with Crestron, AMX, QSC, and other control systems.

Can it power the encoders and decoders?

No — the controller manages control only. Endpoints are powered by PoE from the AV switch or their own DC adapters.