



Video Processor Guide

2025

Jupiter Quality Guidelines



Be user friendly
and empower collaboration



Be ready
and be versatile



Be secure
and reliable without fail



ISO 9001: 2015 production floor



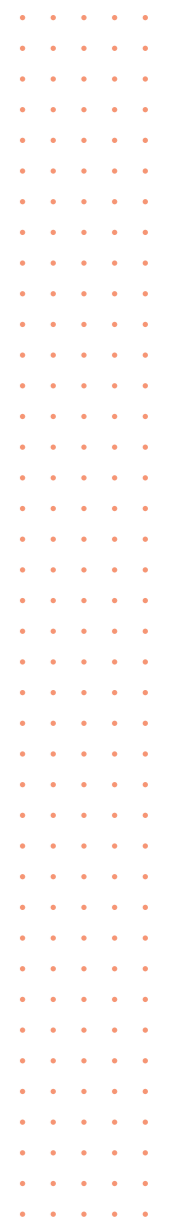
More data to analyze than ever

Companies need to have fast, agile, and scalable systems to accommodate the rapidly changing technology landscape. Optimizing the visualization of critical data quickly and efficiently is essential to the modern control room environment.

One size does not fit all

Organizations need the ability not just to customize how data is viewed but to create automated processes to monitor continuous streams of data and trigger alerts should irregularities arise.

- ✓ Jupiter's video wall processors and range are modular. They can expand to any size or configuration imaginable – from a single stand-alone display to a massive global network of thousands of connected display wall end-points accessed by all teams simultaneously worldwide.
- ✓ Multiple teams simultaneously reduce integration challenges. Jupiter processors integrate the software with a robust API allowing the creation of customized features and integrations.



Jupiter Catalyst

Breaking boundaries in performance and flexibility, Catalyst takes display wall processing to the next level, providing the best video wall solution on the market.

Key Benefits

- Windows 10 processor supporting massive video walls with resolution well beyond 8K.
- Supports up to 156 4K inputs and 1500+ IP streams.
- Ideal for all enterprise and command and control environments, allowing immediate access to critical data quickly and efficiently.



CRS-5K

Compact but powerfull

- Certified for PANA 5K 21:9
- Designed for small video walls or ancillary displays
- IP, Local Content, VNC



Catalyst Element

1U Slim design

- Small to medium sized configuration
- Xeon processor based
- Up to 8 Channel Graphic Outputs



Catalyst V

Versatile and adaptable

- Designed for medium sized configurations
- Powerful i9 processor
- Ultra-quiet



Catalyst XL

Workhorse and flagship processor

- Designed for mission critical
- Massive amount of inputs
- Xeon processor options with up to 16 cores

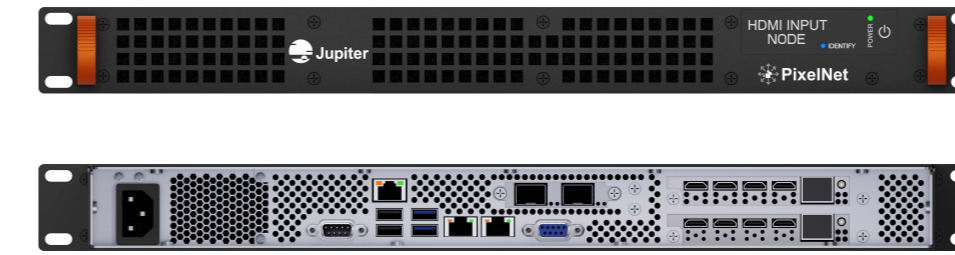
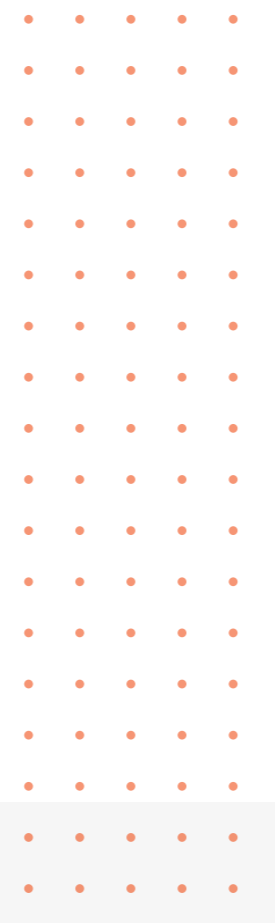
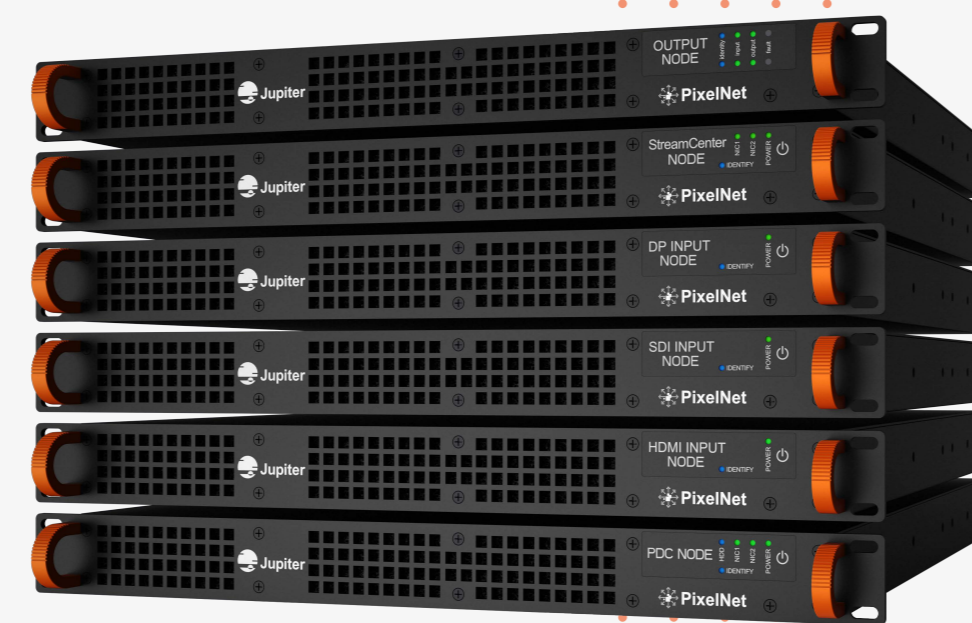
Jupiter PixelNet

PixelNet is a revolutionary and powerful encrypted way to capture, distribute, control, and display totally uncompressed video up to 4K along with audio sources, KVM, over L2 network.

PixelNet systems can scale and distribute video across buildings, campuses, cities, there is no limits.

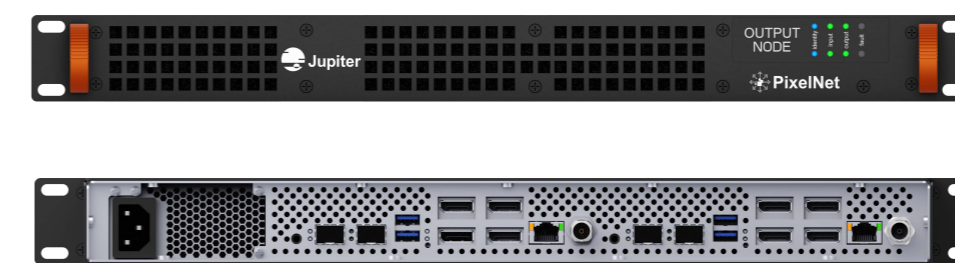
Key Benefits

- Uncompressed video for unmatched quality.
- 99.99% uptime with multiple redundant hardware options.
- Unlimited number of inputs and outputs.
- Full KVM solution.
- JITC Certified



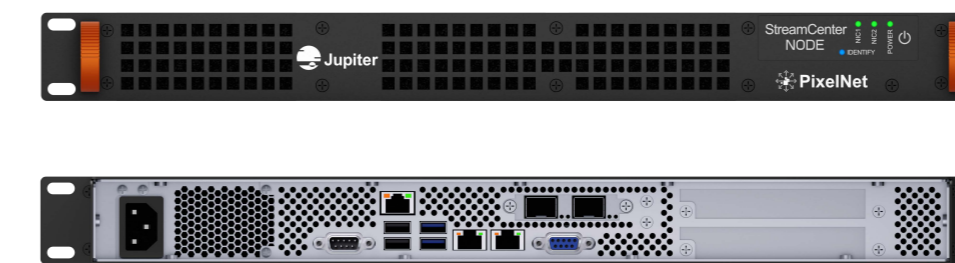
Input Node

Plug any direct input source into the input node with the appropriate cabling.



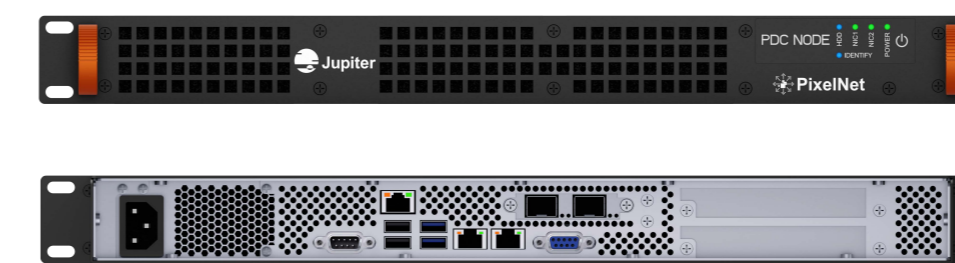
Output Node

The PixelNet Output Node multiple windows on a single screen, or an entire display wall. It is also available as a standalone output node.



StreamCenter

Decode and display multiple streaming IP sources – each one can handle 1080 or 4K resolutions.



Domain Controller PDC

Manages all nodes and network bandwidth while supporting multiple video walls and managing various geometries and resolutions. A second PDC can be added for full, automatic redundancy for mission-critical 24/7/365 operations.

J Series

J-Series processes are Linux based video processors that can be used for any video wall application. Designed from the ground up to be fast, efficient, and cost-effective yet straightforward to use and deploy.

Key Benefits

- Warp-blend options for video projectors
- HDBT I/O support
- Up to 3 video walls per chassis.
- Driven by LightSpeed, only from Jupiter, enable source-to-display frame transfer in less than 16ms, making it the fastest in the industry.

J400



4U customizable inputs and outputs slots.
Max 8 input slots / 3 output slots.

I/O cards available: HD-DVI, 3GSDI,
HD-HDMI, 4K HDMI at 30hz or 60hz

J600



6U customizable inputs and outputs slots.
Max 14 input slots / 5 output slots.

I/O cards available: HD-DVI, 3GSDI,
HD-HDMI, 4K HDMI at 30hz or 60hz

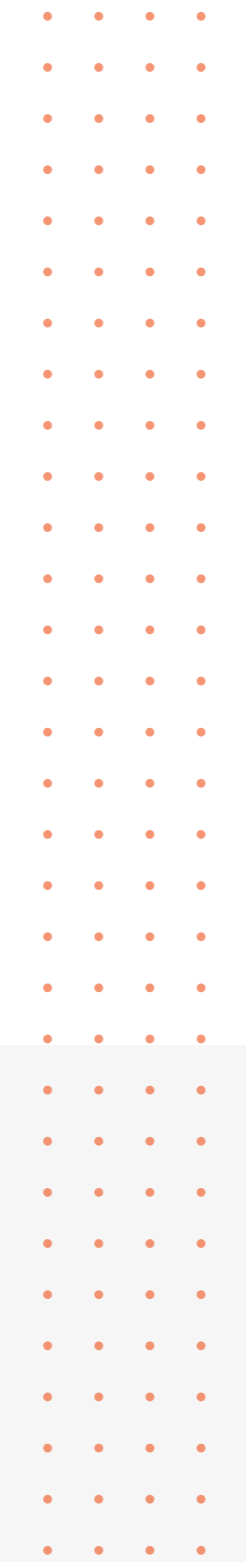
J4

Don't let its size fool you. The J4 is a compact, yet powerful video wall processor, the comes in various inputs and form factors. The appliance can be used as an independent video wall for digital signage or placed near the video wall to break out a single 4K input into multiple FHD outputs.

Key Benefits

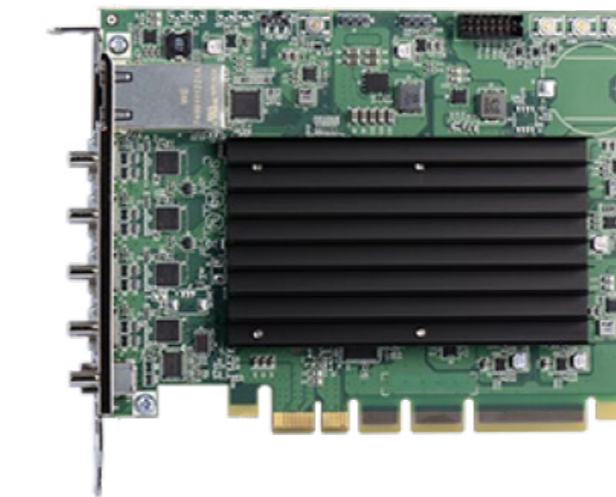
- Pre-configured for a 2x2 and 1x3.
- Crop, scale and rotate independent displays.
- On-device buttons for easy configuration.
- Rack mount kit.
- Bezel Management.

J4



J4DP

1x DP 1.2 Input rez up to 8K / 4x HDMI FHD outputs



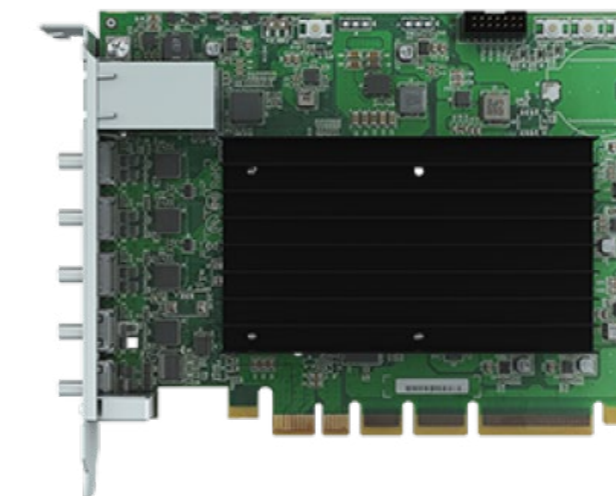
J4DPe

1x DP 1.2 Input rez up to 8K / 4x HDMI FHD outputs



J4HDMI

1x HDMI Input rez up to 4K / 4x HDMI FHD outputs



J4HDMIe

1x HDMI Input rez up to 4K / 4x HDMI FHD outputs

StreamPoint Encoders

Easily stream video and audio data from any remote location on an IP network in brilliant 4K or HD. Effortlessly integrates with PixelNet®, Catalyst, Canvas, and other display wall products. Built on H.264, StreamPoint 4K fits seamlessly into your existing infrastructure and operates with virtually any network device for high-density content distribution and system scalability.

Key Benefits

- Stream in 4K or HD with multiple simultaneous sources without quality loss.
- Comes with StreamPoint® software management for easy configuration and control.
- Rack ready form.



Streampoint HD or 4K Single Channel

Easily stream video and audio data from any remote location on an IP network in brilliant HD

- 4k or HD 1080P display resolution
- Stream over IP network
- Integrates with all other Jupiter processors



Streampoint 4K Dual or Quad Channel

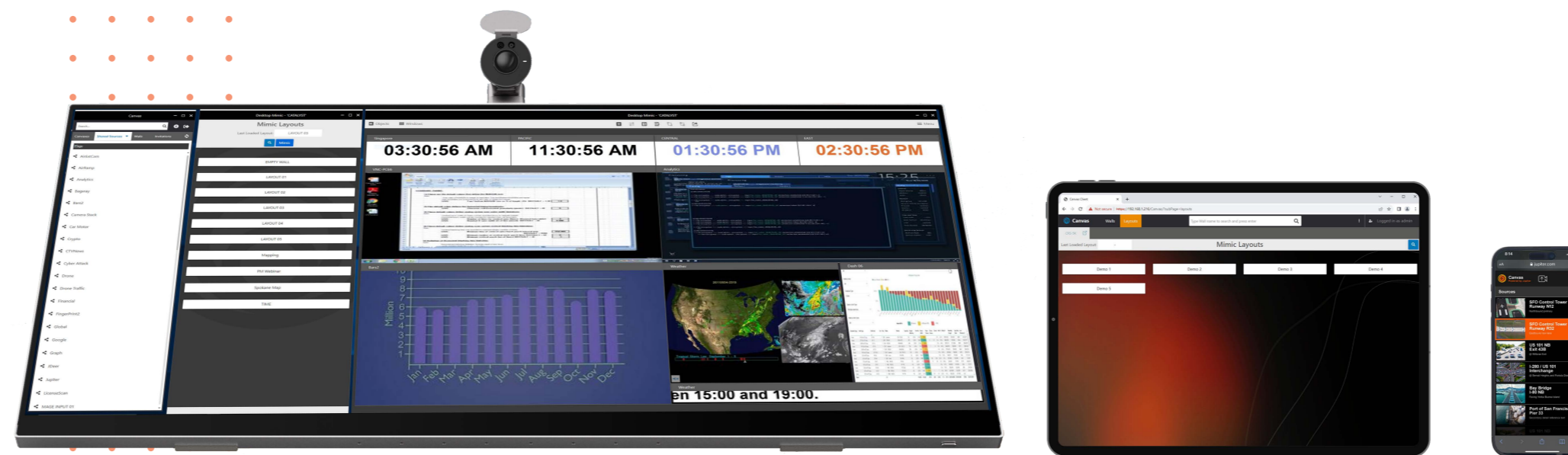
Easily stream video and audio data from any remote location on an IP network in brilliant 4K

- Available in 2x 4K inputs or 4x 4k inputs
- Stream over IP network
- Input node supports up to 4 concurrent 4K streams
- Integrates with all other Jupiter processors

StreamPoint 4K fits seamlessly into your existing infrastructure and operates with virtually any network device for high-density content distribution and system scalability.

Canvas

Created for Catalyst and PixelNet® processors, Canvas is real-time visual intelligence developed specifically for Enterprise deployment. Features like web-based management and administration, Windows-based hardware, software-only options, and TLS protocol make deploying Canvas simple for those outside the control center. Likewise, crews in the field can capture events and introduce live streams into the video wall for supervisors and managers to view.



Canvas

Key Features

Key Benefits

- If you don't have a Jupiter processor yet, you only need a Canvas license on your processor, and you are good to simultaneous sources without quality loss.
- Expand your reach – canvas UI is web-based display.
- Ideal for distributed and hybrid workforces.

Web-based, intuitive object-based, drag-and-drop interface.

Supports both Active Directory and Workgroup environments for user authentication.

Permission-based access with identical views, whether inside or outside of the control room.

Easily select streaming sources for sharing, annotate directly on live video and data, and arrange content from cameras, applications, and web.

Arrange video and data windows anywhere on the display wall at any size.

Save preset scenes in advance for quick recall for specific situations, specific users, or time of day.

Provides encrypted security and TLS protocol.

The right product for the right feature

See what our range of processors can achieve

	Video Wall Management	Decode IP streams	Encode HD or 4K sources	Over IP video distribution	KVM compatible	Web UI Manageable	Windows 10 based system	Canvas enabled	Role based access	Mobile support	HDCP support	Multiple type output cards custom configuration	Redundant psu	Rack Mountable
Catalyst	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pixelnet	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
J series	✓	✓				✓			✓		✓	✓	✓	✓
J4	✓								✓		✓			✓
Streampoint			✓				✓		✓		✓			✓

Products for Every Solution

For over 40 years, Jupiter Systems has innovated seamless enterprise collaboration solutions, data visualization in video walls, control rooms, large venues, conference rooms, workstations, and more. Our turnkey solutions deliver fluid, convenient, dynamic ways to see, share and collaborate anywhere in the world. See Everything. Collaborate with Anyone. Work Anywhere—24/7, 365 days a year.

Because very modern problems require some advanced technology to make sure the space you design is not only meeting requirements for now but remain sustainable and futureproof.



Military



Security



Utilities



Education



Enterprise



Sports





Military & Government Command Centers

Nowadays, governments and military entities need the most secure technologies and versatile products for every aspect of operations, from command centers to control rooms, and also at the most critical locations, whether at corporate or in the field.





Security and Surveillance

Security and surveillance rooms can be the hub of centralized communication of hundreds of video feeds. Not only do those feeds have to be secure with the wall's capabilities to display close to an infinite number of them, but access management is also a key element in those scenarios.



Utility & Energy

Millions of households and companies depend on utility and energy entities. Networks of any kind and assets monitoring are critical not only to ensure that levels or services are operating at the best conditions, but rooms have to be also designed to allow quick decision making in case of emergency.



Education & Auditoriums

Educational spaces and large learning spaces such as auditoriums are reimagining visualization due to the new hybrid learning models.



Enterprise & Meeting Rooms

The rise of modern workspaces and trends of the future of collaboration 2.0 means that meeting spaces, public forums, and visual communication has to be rethought. At the same time, installations have to be simplified with more versatile hardware while keeping levels of security and monitoring higher than ever.





Commercial Digital Signage, Sports and Entertainment

More displays, different types of support, and higher quality content are being used for digital signage across all kinds of businesses and entertainment places. A bespoke front-end viewer experience requires the best in-the-market installation in the backend.





**For more information
on our video wall processors
visit [Jupiter.com/video-wall-processors](https://jupiter.com/video-wall-processors)
or contact sales@jupiter.com**