



Product Overview

The **Datalux DMV-4W** is a sophisticated 4K/60 multi-window processor engineered for advanced AV applications. It seamlessly scales and displays up to four 4K/60 HDMI source signals simultaneously on a single screen, ensuring exceptional image quality and professional presentation. Designed to handle dynamic content display with unparalleled flexibility, it features support for multiple display layouts, precise 4K scaling, and intuitive controls, making it the ideal choice for control rooms, presentation environments, and live event setups.

The **DMV-4Wi SDI model** extends capabilities by including support for 12G-SDI sources, catering to broadcast and production environments. Equipped with both HDMI and twisted pair outputs, the processor provides simultaneous uncompressed 4K/60 signals for local and remote displays

Key Features

- ✓ Inputs: 4 HDMI 2.0 inputs supporting up to 4096x2160 @ 60 Hz, with 1 live background input for customization.
- Outputs: 2 outputs (1 HDMI 2.0 & 1 Twisted pair) with scaling and combining the HDMI video sources into four windows on one display.
- Resolutions support upto 4096x2160 @ 60 Hz (4:4:4 chroma sampling) and 18Gbps data rate.
- Video and Image Quality: Supports resolutions from 640x480 to 4096x2160, 4K scaling for clear rendering, and HDCP 2.3 compliance for secure content. It can display live, non-scaled content or static graphic images.
- Display Layouts: Features multi-window modes (quad-view, side-by-side, PiP), with customizable window placement, sizing, and orientation (landscape/portrait) with Auto scaling of inputs and outputs. Supports rotation of input source and output.
- Content Presentation: Allows text customization, seamless transitions, video keying, and advanced layering. Annotation is available with the Datalux Soft license. This lets users overlay notes or drawings on live video or presentation content using either a touch screen display or a mouse. A user-friendly on-screen menu provides quick access for seamless annotation. The annotated visuals can be saved to the device's internal storage or exported to a external USB drive.
- ✓ Audio Features: Audio de-embedding for HDMI audio stream extraction.
- Control and Management: Offers a web-based management and control interface, RS232, Ethernet support, front-panel controls, and EDID management.
- Performance and Storage: 4GB flash memory for storing presets and settings. Secure Operation: HDCP 2.3 compliant with built in EDID management to ensure reliable operation with encrypted content.



Technical Parameter

Specification	Details
Video Input	- 4 x HDMI 2.0 inputs, each capable of processing 4K signals with 18 Gbps bandwidth.
	- $1x$ HDMI input dedicated for live background feeds to enhance presentations with static or dynamic backgrounds.
Video Output	- 1 x HDMI output for local displays.
	- 1 x Twisted Pair output for uncompressed 4K/60 transmission over long distances.
Туре	Rack-mountable multi-window processor designed for real-time scaling and combining HDMI video sources into four distinct windows on a single display.
Control Options	- Front-panel buttons for direct physical control.
	- RS232 for integration with third-party control systems.
	- Ethernet for remote and web-based control.
Memory	4GB internal flash memory, enabling the storage of layouts, configurations, and settings for fast recall.
Audio Features	- Supports stereo audio de-embedding for audio signal extraction from HDMI inputs.
	- Audio pass-through ensures minimal latency and high fidelity.
Seamless Transition Effect	Offers advanced transition effects like cut, dissolve, and fade for smooth switching between inputs.
Design and Build	- Compact, robust, rack-mountable chassis built to integrate seamlessly into professional AV racks.
	- Built for durability and consistent operation in high-demand environments.
Resolutions	- Input and output resolutions supported range from VGA (640x480) to 4K (4096x2160) at 60 Hz, with 4:4:4 chroma sampling.
	- Custom resolution support for non-standard formats.
Ethernet Protocol	Compatible with DHCP, DNS, HTTPS, SFTP, SMTP, SNMP, SSH, TCP/IP, Telnet, and UDP/IP, IEEE 802.1X, ICMP (ping), NTP (time sync) protocols.
HDCP & EDID	- Fully compliant with HDCP 2.3 for secure handling of protected content.
	- Advanced EDID management, featuring auto-detection and manual configuration capabilities.
Scaled Resolution	Supports both standard and custom output resolutions, ranging from 640x480 to 4096x2160.
Software Management	- Web-based System Management interface accessible via PCs, tablets, and mobile devices.
	- Intuitive layout creation with save/recall layout capabilities for custom configurations. - Layout mapping with preset, save and recall facility



	- Network setup and management, Video on display wall setup and management, and user setup and management functionalities.
	- Advanced viewing modes: quad-view, side-by-side, picture-in-picture (PiP), and single window Capable of showing all different possible combinations view options with the 4 inputs
Image and Video Features	- Advanced 4K scaling for seamless visuals and superior image quality.
	- Window size and position customization for flexible layouts.
	- Video layering, keying, and compositing features for professional-grade content management.
Features	- Auto-detection of EDID for plug-and-play setup.
	- Monitoring capabilities to display device health and signal statuses.
	- Image freeze and mute control for professional use.
	- Text overlay and positioning customization with options for positioning, color, size, background, border styles and fonts.
Ethernet Data Rate	Supports 10/100/1000Base-T networks, operating in half or full-duplex mode with auto-detection for reliable connectivity.
Expandability	Cascade option provides expandability to show upto 16 windows(max.) on one display.
Usage Scenarios	Perfect for high-end applications like control rooms, live event productions, boardrooms, video walls, and mission-critical broadcast operations.
Data Rates	Handles bandwidth-intensive applications with data rates up to 18 Gbps for smooth 4K processing.
Power Requirements	Input voltage: 100-240V AC, 50/60 Hz with low power consumption. Built for 24/7 operation.
Compliance	CE, FCC, RoHS
Dimensions	- Height: 2RU (rack unit).
	- Depth: Approximately 250 mm (9.8 inches).
	- Width: 482.6 mm (19 inches, standard rack-mountable).
Weight	5.5 kg
Temperature Range	- Operating Temperature: 0°C to 55°C
	- Storage Temperature: -20°C to 65°C
Humidity	10% to 90% non-condensing relative humidity.

