Product Data Sheet

VideoPlex4000 Video Wall Controller - 4K, HDMI

Overview

The VideoPlex4000 is a standalone display wall controller that supports two HDMI 1.4 inputs for 4K @ 30 Hz and one DisplayPort 1.2 input for 4K @ 60 Hz. The intuitive user interface allows users to determine which input is used.

DisplayPort 1.2 Loopthrough allows the DP video to be viewed on a local monitor as well as on the wall.

Outputs support 1080p to up to 4 HDMI displays.

Basic Features

- Infinite creative configurations
- Up to UHD / 4K 60 input, four HD 1080p outputs.
- Rotates, crops, scales, mirrors, and bezel-corrects.
- Multiple inputs for flexible connectivity (Dual HDMI 1.4 or single DisplayPort 1.2 inputs).
- HDCP support on all inputs and outputs.
- True standalone operation: VideoPlex4000 can adapt to changes in inputs by adjusting all scale factors.
- Network or USB interfaces allow platform-independent control.
- Pre-load an image for use when signal is not detected.

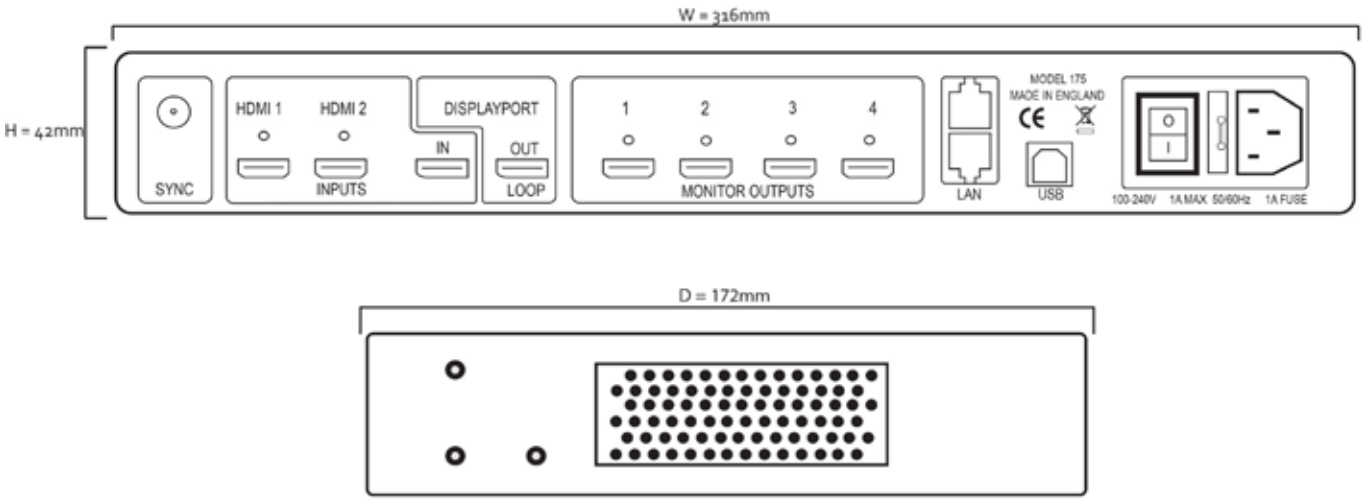
Advanced Features

- Each output monitor can take its input from any region of the input image, because all of the required cropping, scaling, rotation, and frame-rate conversion is handled by the VideoPlex4000 hardware. These regions can overlap to allow any output to replicate another or can be configured to support any creative splice of the source material. This allows the support of many non-rectangular screen arrangements, as well as any mix of monitor orientations allowing users to create an almost unlimited multi-monitor canvas.
- The VideoPlex4000 also allows users to pre-load an image for immediate display in those cases when the media source or cables malfunction and no signal is being received.
- Dual ethernet ports allow users to add the device to their networks. Only one VideoPlex4000 in the chain requires connection to the physical LAN, because Ethernet loop-through is supported on the second port, meaning multiple devices can be connected.
- A multi-screen design tool, VideoPlex Designer, has also been updated to incorporate VideoPlex4000. VideoPlex Designer allows users to add displays from a database of monitors, visualize their content by adding inputs and adjusting display regions, and instantly program all VideoPlex4000s either via USB or the network ports.

Specifications

Approvals	FCC, TUV, CE, UL®, RoHS, WEEE
Control Interfaces	Dual 100BASE-T Ethernet ports with built-in managed switch. USB 2.0 Type B connector (full speed operation)
Firmware Support	Updates supported via USB and Ethernet connection
Genlock Input	Analog black-burst on dedicated BNC connector. Any video input (HDMI1, HDMI2, DisplayPort)
Heat Dissipation	3.41 BTU/hr
Input Resolution	HDMI 1.4: 3840 x 2160 @ 30 Hz or equivalent up to 297 Mps; DisplayPort 1.2: 3840 x 2160 @ 60 Hz or equivalent up to 616 Mps)
Input Surface	8 K x 8 K maximum
Leads Supported	HDMI and DisplayPort input, HDMI output
Operating System Support	All known operating systems; All known hardware that supports/follows the HDMI spec
Output Resolution	HDMI: 1080p/60 or equivalent up to 165 Mps; Loop-through: DisplayPort1.2 (locked to selected video input resolution)
USB Support	USB 2.0, full-speed (12 Mbps) operation; Firmware support: Updates supported via USB
User Controls	(1) Power switch
Interface	(2) HDMI capture, (1) Single-link DisplayPort; (4) HDMI output, (1) DisplayPort loopthrough
Connectors	Input: (2) HDMI female, (1) DisplayPort female; Output: (1) DisplayPort female, (4) HDMI female; Power: (1) IEC-C14; (1) USB Type B female; (1) Sync port; (2) RJ-45 Ethernet
Indicators	(3) LEDs: (1) Power, (1) Input, (1) Status
Environmental	Temperature Tolerance: Operating: 32 to 95° F (0 to 35° C); Storage: -4 to +158° F (-20 to +70° C); Humidity: Operating: 90%, noncondensing; Maximum Altitude: 6400 ft. (2000 m)
Power	Input Voltage/Volts: 100–240 VAC, 50/60 Hz internal power supply; Input Current/Watts: 30 W; Power Consumption/Watts: 30 W
Dimensions	1.75"H x 12.4"W x 6.7"D (4.4 x 31.6 x 17.2 cm)
Weight	4.1 lb. (1.86 kg)

Dimensional diagram of the VSC-VPLEX4000.



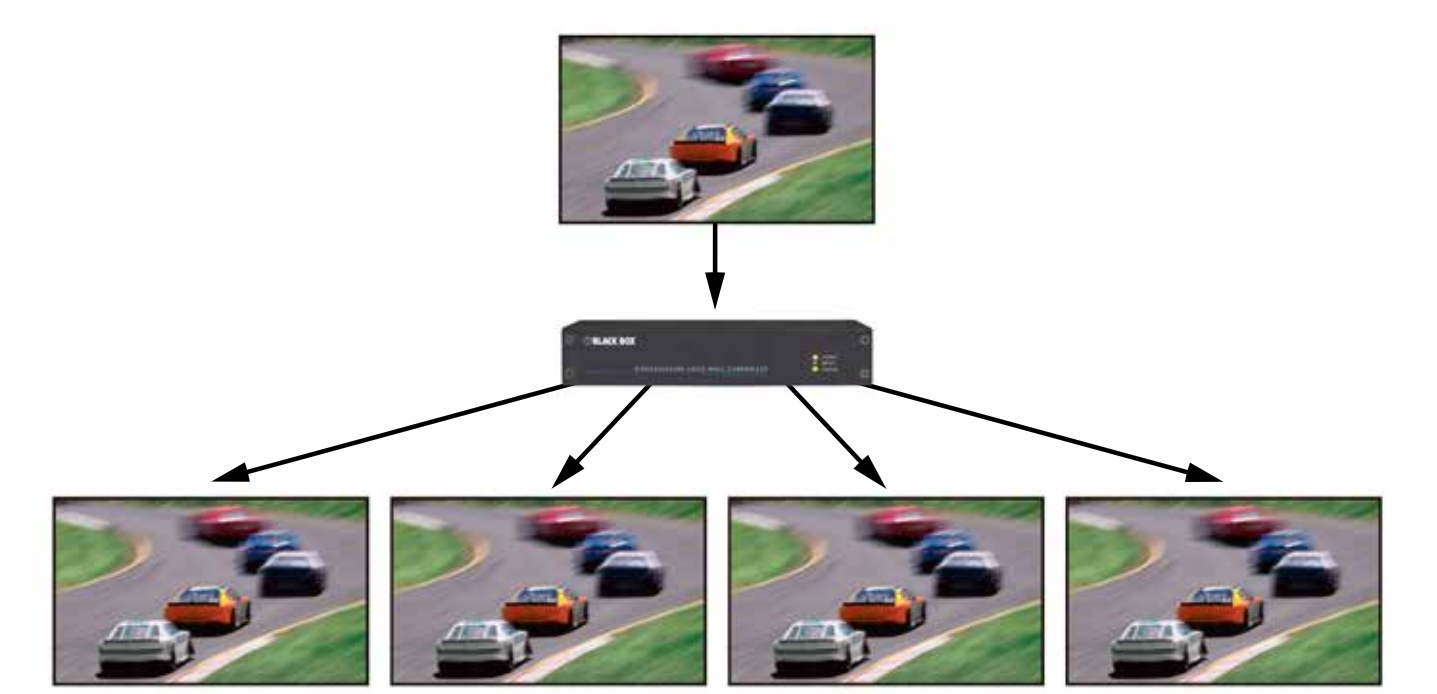
What's Included

- VideoPlex4000 unit
- (1) rackmount kit
- (1) USB 2.0 cable Type A to Type B
- (1) DVD containing the software application and the VideoPlex 4000 user guide
- (1) Quick Start Guide
- (1) IEC-320 C13 to Nema 5-15 power cable
- (6) rackmount screws
- (6) HDMI cable locks
- (6) tie wraps

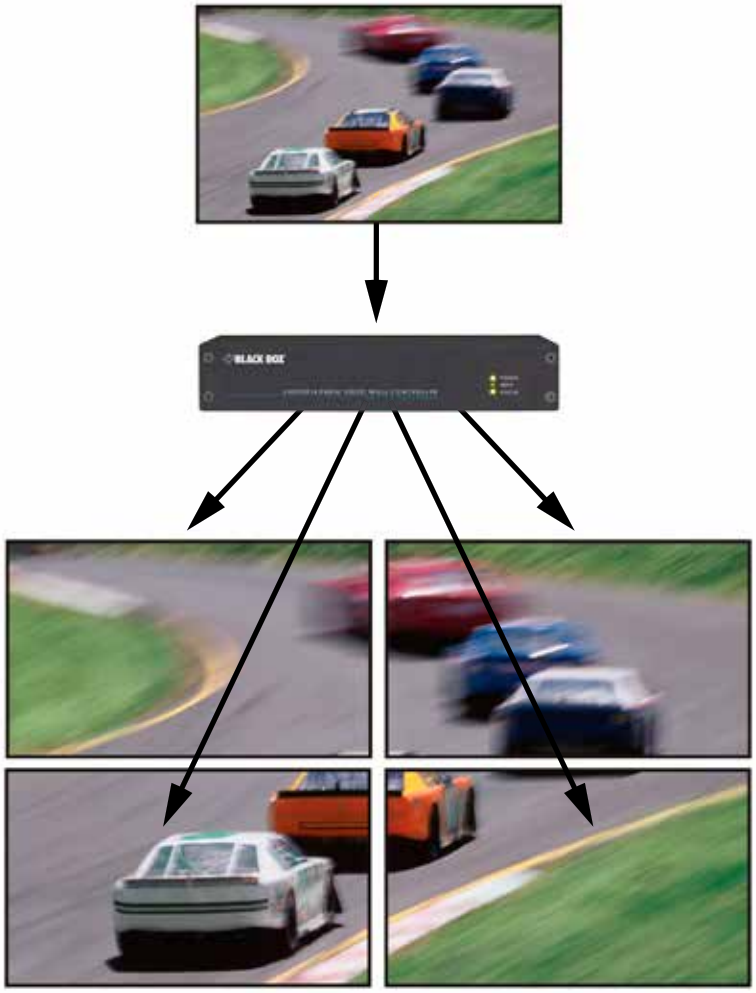
Typical applications of the VideoPlex4000 are shown here and on the following pages.

NOTE: Listed on the next few pages are just a few examples of what can be achieved with the VideoPlex4000. The list of examples is not definitive and users are encouraged to experiment with different display configurations.

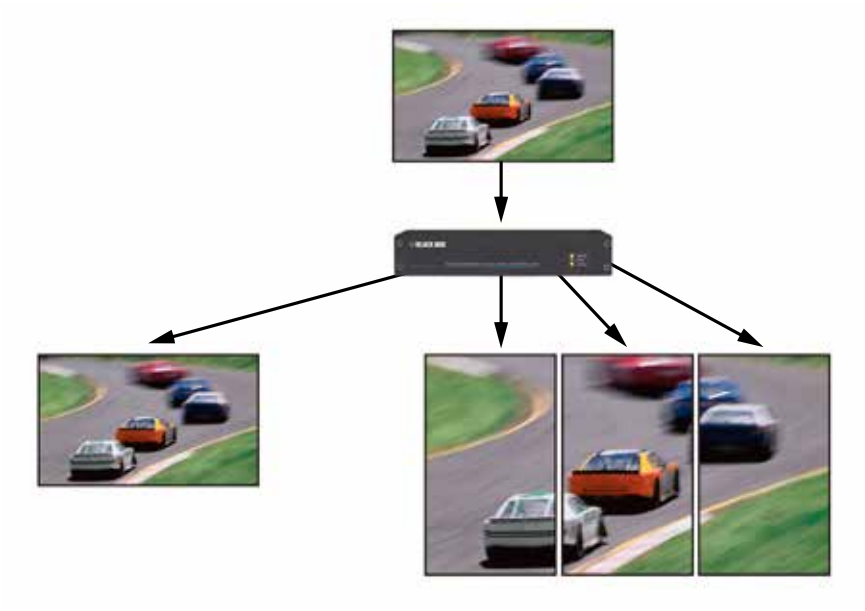
Example 1: Duplicate the input signal four times and display each duplicate signal on separate screens.



Example 2: Divide the input signal into quadrants and display each quarter on separate displays with optional frame rate conversion (in this case 30 to 60 Hz). You can adjust crop regions to compensate for monitor bezel.



Example 3: Duplicate the input signal. Display the first signal on a single landscape screen. Divide the second into thirds, rotate to portrait orientation, then upscale the signal, and split it between three displays.



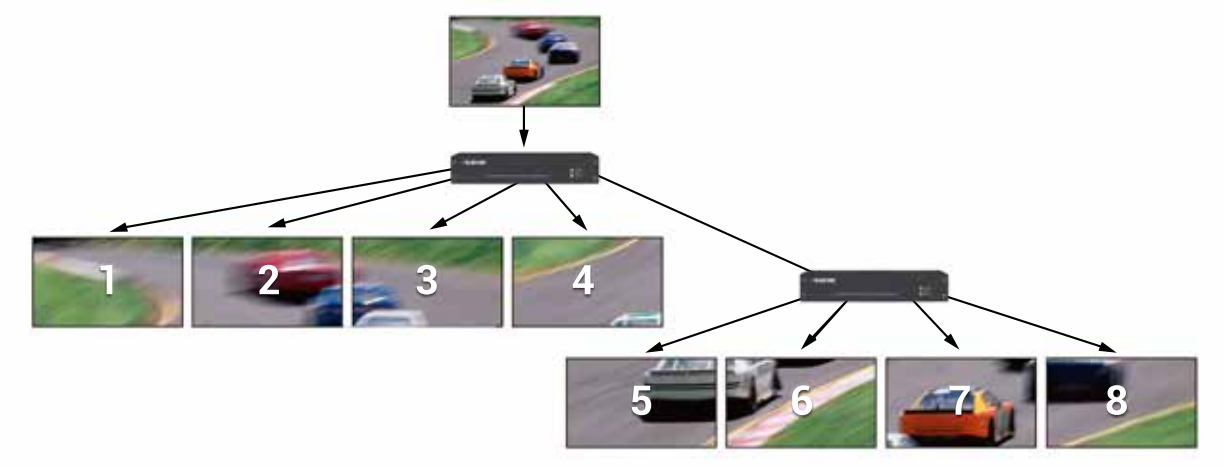
Example 4: Crop input signal, upscale specific areas, and display on four separate screens.

Example 5: Crop the VideoPlex4000 input signal and display two quarter-screens in landscape orientation and two quarter-screens in portrait orientation.

Example 6: Crop the VideoPlex4000 input signal. Rotate through 90°, 180°, or 270° display in landscape and portrait orientations. Arbitrary crop regions can allow the monitors to be artistically arranged, but maintain an undistorted image.

Example 7: Multiple Devices:

Where more than four outputs are required (the example below shows eight), the Auto Config VideoPlex4000 function will determine the most logical way to connect all devices. To daisy chain a second VideoPlex4000, use a DisplayPort cable (not supplied) to connect the DisplayPort Out Loop on the first VideoPlex4000 to the DisplayPort Input on the second VideoPlex4000.



Disclaimer:

Black Box Network Services shall not be liable for damages of any kind, including, but not limited to, punitive, consequential or cost of cover damages, resulting from any errors in the production information or specifications set forth in this document and Black Box Network Services may revise this document at any time without notice.

About Black Box:

Black Box is a leading technology product solutions provider that helps customers build, manage, optimize, and secure their networks. The Black Box quality management system is ISO 9001:2008 certified, and the company has received numerous industry recognitions. Black Box provides its customers with free, 24/7 pre- and post-sales technical support. The Black Box catalog and Web site offer an extensive range of infrastructure products including Cabling, Cabinets & Racks, Data Center Cooling Solutions, Power & Surge Protection, and Environmental Monitoring.