Matrox Mura[™] MPX Series





Matrox Mura MPX Video Wall Solutions Meet Your Project Requirements



Building a Video Wall? It's Easier Than You Think.

Building a video wall doesn't need to be an expensive or complex process—in fact, it's easy when using Matrox Mura MPX Series video wall controller boards. Mura MPX Series allows you to configure a video wall with off-the-shelf components and control it with user-friendly software. Simply choose the boards you need from a complete hardware line-up and then select one or more software control options. You can also create more advanced controller systems by pairing Mura MPX Series with Mura IPX Series 4K capture and IP encode/decode cards.

Mura MPX Series Features	Benefits			
Integrated Inputs and Outputs	 Start building video walls with just one board, with up to four universal inputs and four full HD outputs on a single slot add-in card Leverage load balancing and bandwidth preservation for large-scale, multi-channel projects 			
PCIe x16 Gen2 Bus Interface	 Unparalleled performance with 16 lanes available for duplex, peer-to-peer data transfer on Mura MPX-4/4, MPX-4/2, and MPX-4/0 boards 			
Universal Input Capture	 Capture DVI, RGB/VGA, Component, S-Video and Composite video on the same board Separate boards are available to capture SDI feeds Dedicated NTSC/PAL/SECAM capture boards support 8 or 16 channels each Capture HDMI and IP sources by pairing Mura MPX Series with Mura IPX Series 			
Input Auto Detection	Mura MPX detects newly connected inputs and determines color space, resolution, and refresh rate automatically, making adding inputs as simple as making the hardware connection			
HDCP Compliance	 Capture and scale HDCP content from sources such as external Blu-ray[™] players, set-top boxes, and video game consoles 			
Many Video Wall Management Options	 Complete control from computer consoles, tablet devices, and Crestron[®] touch panels Manage and monitor your video wall from a multi-display console connected to your Mura- based video wall processor: Add a Matrox P690 PCIe x16 or P690 Plus LP PCIe x16 graphics card 			
Scalability	 Create high density, low footprint video wall controllers with up to 56 HD inputs and 56 HD outputs and add multi-stream IP encode/decode functionality and a more favorable input-to-output ratio with Mura IPX 			
Compositing	Use compositing to create Alpha Blending / Color Key / Blend / Crop / Rotation			
Bezel Management	Compensate for display bezels for more realistic video presentation across multiple screens			
Edge Overlap	 Simplify multi-projector edge blending by adjusting the number of overlapping pixels between edge blending projectors to create seamless, unified images 			
Hardware Framelock	Synchronization of multiple outputs provides tear-free display of captured video sources across multiple displays			
Microsoft [®] Windows [®] Environment	Access a Windows desktop to run local applications			
Passive Cooling	Increased longevity and reliability			
NEW Mura IPX Compatibility	Pair Mura IPX Series with Mura MPX boards in Matrox-certified platforms for 4K capture and multi-stream H.264 level 5.2 encoding/decoding over standard IP onto video walls of up to 56 displays and a more favorable input-to-output ratio; See Matrox Mura IPX datasheet for more details			

Universal Output/Input Boards



SDI Input/DVI Output Board



Analog Video Input Boards



Matrox Mura MPX-4/4, MPX-4/2, MPX-4/0

Many Software Options to Manage Your Video Wall.

Matrox offers a complete range of software, APIs, and libraries that allow OEMs, developers and integrators to deploy intuitive, ready-to-use software or build custom interfaces & applications based on project needs. Whatever the installation requirement, Matrox provides the necessary toolkit to help build complete end-to-end solutions. Discover the multitude of software options available to you below.

Matrox Network API

Develop your own custom control application with Matrox's robust and easy-touse command-level API that can be used through Telnet, RS-232, and HTTP/ HTTPS. Clear documentation and .NET sample code are available to kick-start custom control software development or modify existing control software to access Mura MPX and IPX Series' high-end feature sets.

Matrox MuraControl[™] for Tablets

Crestron Integration

Easily integrate customized Crestron touch panel control for Mura MPX-based video walls with free modules to get you started.

 Mura Crestron module: Realized through Matrox membership in the Crestron Integrated Partner Program, this module (available from Crestron) helps integrators link Crestron Control Systems to Mura-based video walls

OEM Partner Program

As part of the Matrox OEM Partner Program, qualified OEMs can develop their own control application using the comprehensive Mura SDK.

Matrox MuraControl

Matrox MuraControl video wall management software provides an easy and intuitive way to manage your video wall locally or remotely. Available as a feature rich, single-license software for Windows or as a free, lighter version app for iPad with drag & drop functionality—you can use it to create and manage layouts offline or in real time.

Key Features

- Easily manage inbound and outbound streams*
- Create, save, rename, copy, export, import, and delete layouts/presets
- · Window transparency and color-keying functions

- Robust upgrade and software-support program
- Position, scale, clone, crop, frame, and label input windows
- Apply color-correction, multi-lingual text overlay, and deinterlacing

	MuraControl for Windows	MuraControl for iPad	
Supported OS	Windows XP, Windows 7, Windows Server® 2008 R2, Windows 8, 8.1, Windows 10	iOS 7 and up	
Getting Started	 Free trial software available from Matrox (USB software license available for purchase) 	 Free app available on the Apple[®] App Store[™] 	



Matrox Mura MPX Series - Essential Building Blocks for Your Video Wall

	Universal Output/Input Boards			SDI Input/DVI Output Board	Video Input Boards		
	Mura MPX-4/4	Mura MPX-4/2	Mura MPX-4/0	Mura MPX-SDI	Mura MPX-V8	Mura MPX-V16	
Part Number	MURA-MPX44HF	MURA-MPX42HF	MURA-MPX40HF	MURA-MPXSDIF	MURA-MPXV8F	MURA-MPXV16F	
Board Type	4 outputs, 4 inputs	4 outputs, 2 inputs	4 outputs	2x DVI outputs, 2x 3G-SDI inputs	8 inputs	16 inputs	
Bus Interface	PCIe x16 (Gen2)			PCle x16 (Gen1)	PCle x4 (Gen1)		
Memory	2GB1			1GB ¹	128 MB ² 256 MB ²		
Data Transfer Rate	64 Gbit/sec			32 Gbit/sec	8 Gbit/sec		
Output Resolutions ³ - SL-DVI - RGB (VGA)	2048x1152 @ 60Hz 2048x1536 @ 60Hz			2048x1152 @ 60Hz 2048x1536 @ 60Hz			
Input Resolutions ^{3, 4} - SL-DVI - RGB (VGA) - Component (YPbPr) - S-Video - Composite - SDI	1920x1200 @ 60Hz; 2560x1600 @ 30Hz ⁵ 1920x1200 @ 60Hz; 2048x1536 @ 47Hz ⁵ 1080i NTSC/PAL/SECAM NTSC/PAL/SECAM —		 		NTSC/PAL/SECAM NTSC/PAL/SECAM 		
Supported SDI Formats	_		3G SDI (SMPTE 424M, SMPTE 425M Level A), HD SDI (SMPTE 292M, SMPTE 296M), SD SDI (SMPTE 259M)	_			
Power Consumption			Typical: 36W @ 12V, 0.5W @ 3.3V or 36.5W Total	Typical: 20W @ 12V, 0.03W @ 3.3V or 20.03W Total	Typical: 10W @ 12V	Typical: 17W @ 12V	
Regulatory Certifications	FCC Class A, CE Class A, ACMA Class A, VCCI Class A, KCC, ICES - 003 Class A, CSA						
Environmental Certifications	EU RoHS, China RoHS, REACH						
Dimensions (LxH)	9.5 x 4.407 inches ⁶ / 9.5 x 3.905 inches ⁷			6.6 x 4.407 inches ⁶ / 6.6 x 3.905 inches ⁷	8.1 x 4.376 inches ⁶ / 8.1 x 3.874 inches ⁷		
Weight	298g	294g	290g	236g	158g	184g	
Operating Conditions	Temperature: 0 to 40 degrees Celsius Humidity: 20% to 80% non-condensing Altitude: from 650 hPa (3580m) to 1013 hPa (0m)						
Non-operating/Storage Conditions	Temperature: -40 to 65 degrees Celsius Humidity: 10% to 90% non-condensing Altitude: from 192 hPa (12000m) to 1020 hPa (-50m)						
OS Support	Windows [®] Embedded Standard 7 (64 bit), Windows 7 Professional (64 bit), Windows 7 Professional for Embedded Systems (64 bit), Windows Server [®] 2008 R2 (64 bit)						
Warranty	3 years						

1. Shared memory for inputs and outputs. 2. Input memory. 3. Maximum resolutions listed above. Support for standard and custom resolutions available. For specific requirements contact Matrox. 4. RGB (VGA) adapter included with Mura MPX-4/4, Mura MPX-4/2 and Mura MPX-4/2. Matrox adapters sold separately for component, S-Video, and composite. Contact Matrox for details. 5. For specific requirements contact Matrox. 6. Including gold-fingers; not including bracket and connectors. 7. Not including gold-fingers.

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