

Scalable. Flexible. Easy-to-Deploy Video Walls.



Matrox® QuadHead2Go™ Series Multi-Monitor Controllers

- Complete flexibility
- Ease of deployment
- Custom control

QuadHead2Go Series

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Leveraging decades of distinctive expertise and innovation in multi-display solutions, Matrox introduces its most recent breakthrough: the Matrox® QuadHead2Go™ Series multi-monitor controllers.

Capable of driving four displays from one signal, the QuadHead2Go multi-monitor controllers are available in both system-independent appliance and single-slot card forms, providing convenient deployment options, and complete video wall scalability and flexibility. QuadHead2Go is designed to power any video wall configuration of any possible dimension, from any video source—reliably delivering flawless image quality across expansive video wall displays. QuadHead2Go’s on-device buttons and pre-set configurations ensure an out-of-the-box, trouble-free installation experience.

The included Matrox PowerWall™ software offers an intuitive and feature-rich interface to effortlessly configure the latest emerging, artistic, and innovative video walls, making installations as easy as 1-2-3.



Complete flexibility

- Drive up to four pristine quality Full HD displays from a single 4Kp60 video signal at full RGB 8:8:8 and YUV 4:4:4 color support.
- Expand to a video wall configuration of any size by using multiple QuadHead2Go units.
- Create a video wall from any content source, including professional graphics cards and integrated GPUs, video wall controllers, digital signage players, media players, decoders, laptops, NUCs, set-top boxes, gaming consoles, and more.
- Design modern and artistic video wall layouts with free rein—each output can have its own resolution, be independently rotated (90, 180, and 270 degrees), cropped, upscaled, downscaled, and positioned anywhere.
- Fashion countless forms of setups—arrange displays in 4x1, 1x4, 2x2, 3x1, 1x3, 2x1, or 1x2 rectangular configurations, in portrait or landscape, or other non-rectangular/artistic configurations—and combine/scale them to create large-scale, captivating video walls.



Ease of deployment

- Simplify installation with guaranteed out-of-the-box plug and play when using the default configuration of 2x2 in landscape—set up without installing software or even connecting a video source.
- Design any custom configuration/array with the intuitive Matrox PowerWall software.
- Ensure compatibility with professional-grade graphics cards with native DisplayPort™ 1.2 support—no adapter required.
- Eliminate physical handling by controlling and updating the units remotely from anywhere on the network (LAN).
- Select and set the display layout by cycling through pre-set configurations* using an on-device button—there is no need to install software when using a pre-set configuration.
- Set up display positions, fine-tune bezels, and also troubleshoot with ease, by accessing the built-in or pre-saved images directly from the appliance, together with display identification information that includes the ID number and the resolution of each output.

As easy as 1-2-3

1 Connect using DP 1.2 input and 4 HDMI outputs

2 Configure using on-device buttons or the Matrox PowerWall software

3 Deploy

* Pre-set configurations can be customized.

Software and API/SDK

Matrox PowerWall



Control of your video wall is at your fingertips

Matrox PowerWall is an advanced yet easy-to-use management software included with Matrox QuadHead2Go that makes video wall deployments simple and efficient.

Key features

- Position, upscale, downscale, rotate, clone, crop outputs as desired
- Create, edit, save, or delete configurations and/or images at will
- Work online or in offline mode
- Control and fine-tune bezels using the pre-set images available on the products
- Locate devices effortlessly over the network using DHCP or Static IP address
- Operate on Microsoft® Windows® 10

Customize applications

- Develop custom functions and applications using the QuadHead2Go REST API.
- Rebrand the Matrox PowerWall software for quick and complete integration by OEMs using the white-label solutions.

Dynamic and scalable configurations



Fine-tune bezels for seamless image displays

Rotate and position outputs independently from one another



Use multiple QuadHead2Go units (appliances or cards) to easily create and/or expand large-scale video wall solutions

Technical specifications

QuadHead2Go multi-monitor controllers

Product

Product type

- 1 input and 4 outputs

Form factor

- Appliance (p/n: Q2G-DP4K)
- Card (p/n: Q2G-DP4K-C): PCIe® x16 mechanical, x1 electrical (power only)

Input connector (video & audio support)

- Appliance: 1x DisplayPort 1.2
- Card: 1x Mini DisplayPort 1.2

Max input resolutions

- 3840x2160 @60Hz, 3840x2160 @30Hz, 7680x1080 @60Hz, 7680x1080 @30Hz, 1920x4320 @60Hz, 1920x4320 @30Hz
- Other input resolutions including 8Kx8K are supported. Contact Matrox for more details.

Output connectors (video & audio support)

- Appliance: 4x HDMI
- Card: 4x Mini HDMI

Max output resolutions

- 1920x1080 @60Hz, 1920x1080 @30Hz, 1920x1200 @60Hz, 1920x1200 @30Hz
- Other output resolutions are supported. Contact Matrox for more details.

Memory

- 1 GB

Configurations

Supported configurations

- 2x2 (default), 4x1, 3x1, 2x1, 1x2, 1x3, 1x4 in both landscape and portrait modes and other non-rectangular/artistic configurations

Non-rectangular/artistic video walls support

- Yes

Rotation

- Yes. Support for 90, 180, 270 degrees

Multi-unit support

- Yes

Bezel management

- Yes

Clone mode

- Yes

HDCP support

- Yes

Video & audio processing

Video scaling

- Matrox's advanced multi-channel Video Scaling Engine

Video rotation

- Yes. Support for 90, 180, 270 degrees

Video cropping

- Yes

Audio format

- AAC, PCM, Stereo, and Mono

Audio sampling rate

- 44.1 KHz and 48 KHz
- 16-bit stereo

Networking interface

Standard

- Ethernet 10/100/1000 Base-T, Auto-Detect, Half/Full-Duplex

Connector

- RJ45

IP version

- IPv4/IPv6*

IP addressing

- DHCP (default) and Static IP

Control & update protocols

Control interface

- 1 x 10/100/1000 Base-T RJ45 Ethernet port

Command & control protocols

- HTTP/HTTPS
- UPnP (discovery)
- mDNS and DNS-SD (discovery)

Firmware update

- Via network interface

Color space

Input color space

- **RGB:** 8:8:8 (24 bits per pixel)
- **YUV:** 4:4:4, 4:2:2 (8 bits per component)

Output color space

- **RGB:** 8:8:8 (24 bits per pixel)

Environmental & power conditions

Operating conditions

- Temperature: 0 to 45 °C/32 to 113 °F
- Humidity: 20% to 80% (non-condensing)

Storage conditions

- Temperature: -40 to 70 °C/-40 to 158 °F
- Humidity: 5% to 95% (non-condensing)

Power supply

- Appliance:
 - 100-240 VAC in, 12 VDC out, 42 W
 - DIN4 locking power connector
- Card: None (power from the system)

Maximum power consumption

- 15 W

Hardware

Dimensions (WxHxD)/weight

- Appliance: 5.50 x 1.25 x 7.21 in (13.97 x 3.18 x 18.31 cm)/494 g
- Card: 0.85 x 5.00 x 6.21 in (2.16 x 12.70 x 15.77 cm)/170 g

Hardware included

- Appliance:
 - 4 x 6 feet power cables for US, EU, UK, Aus/Nz
 - 1x 12 V, 3.5 A, 42 W external power supply with DIN4 connector
- Card: None

Regulatory/environmental compliance

- EMC Class A: FCC, CE, KC, RCM

Warranty

- 3 years

Accessories

- Appliance:
 - Rackmount Kit (RMK-19TR-A)
 - VESA bracket (RMK-6BRKT-A)
 - Secure Cable Solution (SK-Q2G-A)
- Card:
 - Secure Cable Solution (SK-SNLB-6)

Software

Matrox PowerWall

- Yes. Free software available online. See Matrox PowerWall datasheet for more details.

Matrox QuadHead2Go REST API

- Yes. Available for application development. Contact Matrox for more details.

Matrox PowerDesk

- Not supported

Form factors: Appliance and card

The QuadHead2Go Series is available as an appliance (p/n: Q2G-DP4K) or as a single-slot PCIe card (p/n: Q2G-DP4K-C) requiring only power from the system.



* IP version 6 support coming soon. Please view Release Notes for latest updates or contact Matrox for more details

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