

Advanced Graphics Display Technology

The Datapath VQS-01 is a display wall controller which connects to the VGA output of any PC and displays the image across 4 displays. Each display shows 1/4 of the VGA image in a 2 x 2 format.

- 2 x 2 VGA Display Wall Controller.
- The VQS-01 accepts analog or DVI VGA video input.
- Outputs to 4 displays. Each Display shows 1/4 of the VGA image. (2 x 2 format)
- The VQS-01 supports both analog and DVI displays.
- A stand alone unit that requires no software or other hardware to be installed on your machine.
- Multiple units can be used for larger wall configurations.



Features

Display Mirroring

The VQS-01 also supports display mirroring. This allows each output to be mirrored horizontally and vertically. This feature is particularly useful for display walls using LCD panels, allowing each panel of a 2 x 2 wall to be mounted in a different orientation. Many LCD panels have larger borders on two of the panel edges, by changing the orientation the minimum gap between displays can be achieved.

Adjustable Output Refresh Rate

The VQS-01 provides the user with selectable output refresh rates with most modes supporting 50, 56, 60, 70, 72, 75 and 85Hz.

Display Adjustments

When using an analog VGA source, the VQS-01 provides user adjustment for the following:

- Horizontal Position
- Vertical Position
- Phase
- Clock
- Brightness
- Contrast

These adjustments allow the output display to line up exactly with the incoming analog VGA source. Adjustments to any particular display mode may be saved, the VQS-01 will then recall the settings every time the display mode is detected.

Gen-Lock

When using multiple VQS-01 controllers for larger wall configurations, it may be desirable to gen-lock the VQS-01 units enabling all displays to be synchronised. The VQS-01 provides a sync output and sync input, to gen-lock, connect the output from one unit to the input of the next.

Resolution Tables

VESA Modes Supported by VQS-01

Input Resolution	Output Resolution
720 x 400 at 85Hz	4 x 360 x 200 Each output line is doubled.
720 X 480 at 60Hz	4 x 360 x 240 Each output line is doubled.
640 x 350 at 85Hz	4 x 320 x 175 Each output line is doubled.
640 x 400 at 85Hz	4 x 320 x 200 Each output line is doubled.
640 x 480 at 60, 72, 75 and 85Hz	4 x 320 x 240 Each output line is doubled.
800 x 600 at 56, 60, 72, 75 and 85Hz	4 x 400 x 300 Each output line is doubled.
1024 x 768 at 60, 70, 75 and 85Hz	4 x 512 x 384 Each output line is doubled.
1152 x 864 at 75Hz	4 x 576 x 432 Line double optional.
1280 x 960 at 60 and 85Hz	4 x 640 x 480 Line double optional.
1280 x 1024 at 60 and 75Hz	4 x 640 x 512 Line double optional.
1600 x 1200 at 60Hz	4 x 800 x 600

Datapath Modes Supported by VQS-01 (Requires Datapath Vantage4 with driver V1.03 or iH4 with driver V2.14 or above)

Input Resolution	Output Resolution
2048 x 1536 at 30, 35 and 37Hz	4 x 1024 x 768
1600 x 1200 at 30, 36, 37, 42, 56 and 60Hz	4 x 800 x 600
1280 x 960 at 60 and 85Hz	4 x 640 x 480

Custom Modes Supported by VQS-01 (Requires customized input mode with specific timing information)

Input Resolution	Output Resolution
720 x 400 at 70Hz	4 x 360 x 200 Each output line is doubled.
2048 x 1536 at 25Hz	4 x 1024 x 768
2304 x 1728 at 31 and 37Hz	4 x 1152 x 864
2560 x 2048 at 23, 25 and 28Hz	4 x 1280 x 1024
1280 x 960 at 50, 72 and 75Hz	4 x 640 x 480
800 X 600 at 50Hz	4 x 400 x 300 Each output line is doubled.
1280 X 700 at 85Hz	4 x 640 x 350 Line double optional.
1280 X 800 at 85Hz	4 x 640 x 400 Line double optional.
1440 X 800 at 85Hz	4 x 720 x 400
1600 X 1200 at 50Hz	4 x 800 x 600
2560 X 1536 at 30Hz	4 x 1280 x 768

Custom Modes Supported by VQS-01 (May require non-Datapath hardware as well as customized input mode with specific timing information)

Input Resolution	Output Resolution
648 X 481 at 60Hz	4 x 324 x 240 Each output line is doubled.
1280 X 1024 at 50Hz	4 x 640 x 512 Each output line is doubled.
1024 X 768 at 50Hz	4 x 640 x 384 Each output line is doubled.
800 X 600 at 50Hz	4 x 400 x 300 Each output line is doubled.
1600 X 1200 at 50Hz	4 x 800 x 600

Technical Specification

VQS-01 Physical Dimensions	248 x 175 x 55mm
Operating Temperature Range	0 - 35 DegC
Power Requirements	9 - 15V DC at 2 amps (max). Requires VQS PSU. (External PSU)
Cooling	The unit contains a cooling fan. The input and output vents should not be restricted.
VGA Input	1 x DVI connector. Analog or digital
Display Outputs	4 x DVI connectors Analog or digital
Gen-Lock Input/Output	2 x RCA connectors. TTL voltage levels
Power Connector	5 pin DIN

VQS-PSU

VQS-PSU Physical Dimensions	132 x 58 x 30mm
Input Power	110 - 240v AC 50-60Hz
Operating Temperature Range	0 - 35 DegC
Output Power	12V DC at 3.75 amps (max)



Ordering Information

- 2 x 2 wall control unit model No VQS-01. This unit requires an external power supply.
- External power supply model No VQS-PSU.

Datapath Limited

Alfreton Road, Derby, DE21 4AD, England
Tel: +44 (0) 1332 294441
Fax: +44 (0) 1332 290667
Email: sales@datapath.co.uk
Web: <http://www.datapath.co.uk>

Datapath Germany

Friedrich-Ebert Straße 21
D-64846 Groß-Zimmern, Germany
Tel: (+49) 06071 96300
Fax: (+49) 06071 963020
Email: sales.de@datapath.co.uk
Web: <http://www.datapath.de>

Datapath France

7 Rue des Pinsons, 78990 Elancourt, France
Tel: (+33) 130138934
Fax: (+33) 130138935
Email: datapathfrance@sqynet.com