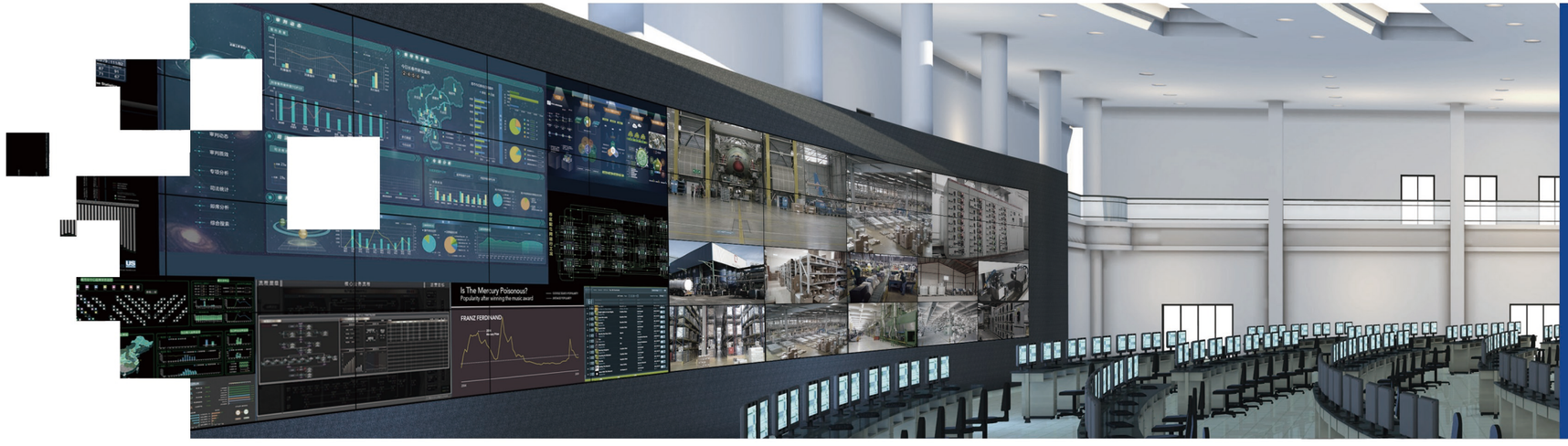
Pro A/V Innovator

DB-VWC2

M4-Series Video Wall Controller



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Contents

Introduction

VWC2-M4 Series hardware based video wall controller is designed and manufactured by DigiBird, to fulfill the rigorous demand of mission critical projects.With modular design, multiple interface and wide products range , M4-series is reliable and flexible solution for video wall up to 144x displays in various venues like control room, command center and data center.

Vision Experience

1. Flexible Windowing

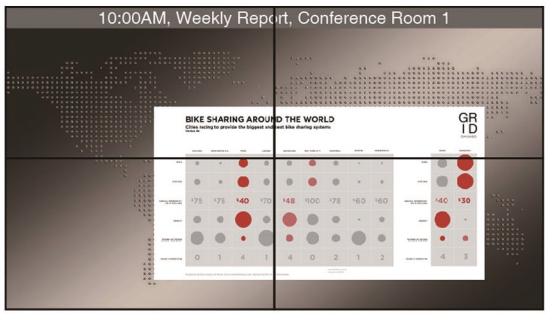
Support display 4x windows, 4x layers, 8x layers or 16x layers (optional) on each display, each window is capable for zooming, roaming, overlay and PIP on the video wall.

2. Scrolling Text

To display notifications, emerging news, or slogans without requirement of third party CMS. Text font, color, and scrolling speed support to be defined by user's discretion.

3. Base Image

Support upload local file to deliver high resolution base image (up to 8K, 128M with JPEG or BMP format) on video wall.



4. Input Label

The input label serves to display input source name on video wall, which will help user to distinguish and operate the input source precisely.

5. Output ID

Help to identify current output cabling between output port and display devices by indicating port ID on each display.

6. Video Wall Monitoring

Monitor real time video wall display via independent monitor with optional Confidence Monitoring Card.

7. IP Streaming

The controller is capable to decode H.264, H.265 IP stream from camera, and deliver the content to video wall without requirement of third party decoders. Capable to encode video signal to H.264 IP stream which can be integrated to the network.

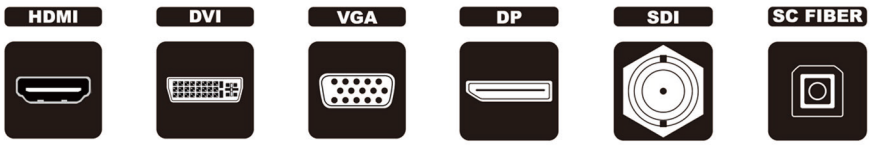
High Reliability

Powerful Processing

- Up to 1440Gbps dedicated video bus.
- Support up to 168x FHD (1920x 1200/60Hz), or 84x UHD (3840x 2160/30Hz) input and 144x FHD (1920x 1200/60Hz) output.
- High reliability and real-time response, excluded PC-based vulnerabilities and latency.

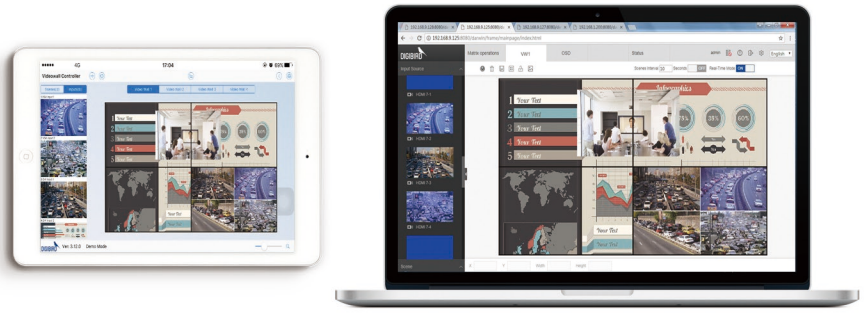
Modular designed I/O cards, fans, and redundant PSUs, easy for maintenance and project expansion.

Versatile I/O interface, flexible for project configuration



Dual control cards, if one breakdown, the other will take over automatically, which enhance the reliability of controller.

Flexible Operation

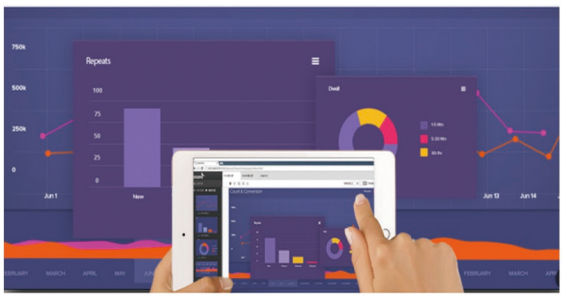


1. Multiple Control Options

- GUI designed web-based control for PC, and free APP for iOS and Android based mobile devices.
- Providing access for third party devices control via RS232 or IP.

2. Preview

Preview all input sources content and virtual video wall display via browser in real-time.

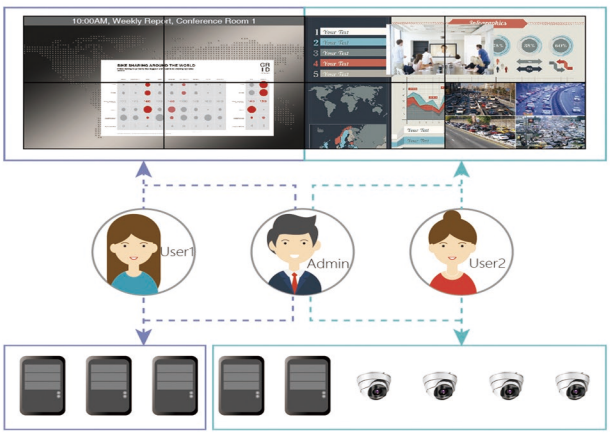


3. Status Monitoring

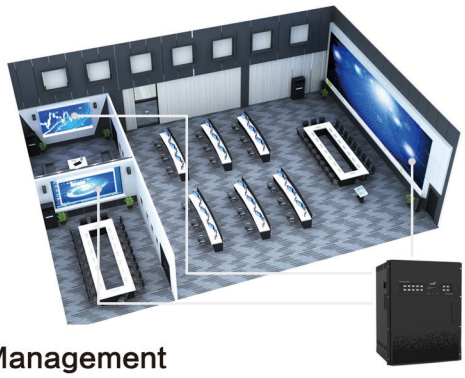
- Auto detect current video wall configuration.
- Auto detect active input source and output.
- Monitor cards temperature and power consumption. Track firmware version and serial number,etc.

4. Specified User Access

Administrator is capable to authorize certain users specific access for video wall management, i.e. specific input, display area and functions, etc.



Flexible Operation



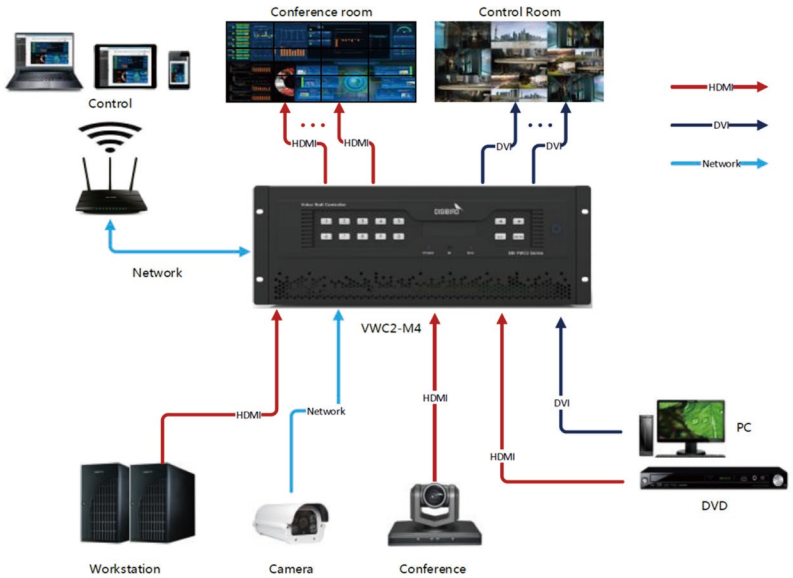
5. Multiple Video Wall Management

- Single controller is capable to manage up to 4x video walls with different resolution and display devices, i.e. LCD, LED and DLP.
- Single unit controller is capable to manage unlimited quantity video wall groups with same resolution.

6. Remote Standby & Wakeup

Remotely standby or wakeup via one-click operation.

System Diagram



Specification

Input Cards

HDMI

Order Code	DB-VWC2-M4-IC-HDMI4
Connector	4x HDMI 1.3
Resolution	1920x 1200/60Hz
Input Channel	4
Power	12.3w

4K HDMI

Order Code	DB-VWC2-M4-IC-4KHDMI2
Connector	2x HDMI 1.4
Resolution	3840x 2160/30Hz
Input Channel	2
Power	11.3w

DVI

Order Code	DB-VWC2-M4-IC-DVI4
Connector	4x SL-DVI-D
Resolution	1920x 1200/60Hz
Input Channel	4
Power	11.3w

DL-DVI

Order Code	DB-VWC2-M4-IC-DDVI2
Connector	2x DL-DVI-D
Resolution	4088x 2160/30Hz
Input Chanr	2
Power	11.3w

SDI

Order Code	DB-VWC2-M4-IC-SDI4
Connector	8x BNC
Resolution	1920x 1080/60Hz
Input Channel	4
Power	13w

DP

Order Code	DB-VWC2-M4-IC-DP4
Connector	4x DP 1.0
Resolution	1920x 1200/60Hz
Input Channel	4
Power	14w

4K DP

Order Code	DB-VWC2-M4-IC-4KDP2
Connector	2x DP 1.1
Resolution	3840x 2160/30Hz
Input Channel	2
Power	14w

VGA

Order Code	DB-VWC2-M4-IC-VGA4
Connector	4x VGA
Resolution	1920x 1200/60Hz
Input Chanr	4
Power	15w

CVBS

Order Code	DB-VWC2-M4-IC-CVBS4
Connector	4x BNC
Resolution	720x 480/720x 576
Input Channel	4
Power	15w

YPbPr

Order Code	DB-VWC2-M4-IC-YPbPr4
Connector	4x VGA
Resolution	1920x 1080/60Hz
Input Channel	4
Power	15w

HDBaseT

Order Code	DB-VWC2-M4-IC-HDBT4
Connector	4x RJ45
Resolution	1920x 1200/60Hz
Input Channel	4
Distance	100m
Power	23w

4K HDBaseT

Order Code	DB-VWC2-M4-IC-4KHDBT2
Connector	2x RJ 45
Resolution	3840x 2160/30Hz
Input Chanr	2
Distance	70m
Power	20w

H.264 IP

Order Code	DB-VWC2-M4-IC-IP2
Connector	2x RJ45
Protocol	H.264/RTSP/RTP
Input Channel	*4x 1920x1080/30Hz*
	or 8x 1920x1080/30Hz, Quad-view output
	or 16x 1280x720/30Hz, Quad-view output

H.265 IP

Order Code	DB-VWC2-M4-IC-IP2
Connector	2x RJ45
Protocol	H.265/H.264/RTSP/RTP
Input Channel	*4x 4000x3000/30Hz*
	or 32x 1920x1080/30Hz, Quad-view output
	or 64x 1280x720/30Hz, Quad-view output

Output Cards

HDMI

Order Code	DB-VWC2-M4-OC-HDMI4
Connector	4x HDMI 1.3
Resolution	1920x 1200/60Hz
Power	26w

HDBaseT

Order Code	DB-VWC2-M4-OC-HDBT4
Connector	4x RJ45
Resolution	1920x 1200/60Hz
Power	34.4w

DVI

Order Code	DB-VWC2-M4-OC-DVI4
Connector	4x SL-DVI-I
Resolution	1920x 1200/60Hz
Power	28w

SDI

Order Code	DB-VWC2-M4-OC-SDI4
Connector	4x BNC
Resolution	1920x 1080/60Hz
Power	26w

VGA

Order Code	DB-VWC2-M4-OC-VGA4
Connector	4x VGA
Resolution	1920x 1200/60Hz
Power	25w

DP

Order Code	DB-VWC2-M4-OC-DP4
Connector	4x DP 1.0
Resolution	1920x 1200/60Hz
Power	23w

Preview

Order Code	DB-VWC2-M4-OC-NPC
Connector	1x RJ45
Capability	64x source
Fresh Rate	10 frame/s

Function Cards

Control

Order Code	DB-VWC2-M4-CC
NET	IP Control
RS232 in	Serial
RS232 out	Serial
USB	*reserved for future*
SYNC	*reserved for future*
Power	7.2w

Monitoring

Order Code	DB-VWC2-M4-FC-CB
Connector	4x DVI-I
Capability	Monitor up to 80x display
VW Group	Up to 4
Resolution	1920x 1200/60Hz
Power	40w

Specification

Chassis

Order Code:	Size:	Input Cards	Output Cards	Control Card	CMC	PSU	Power (W)	Net Weight	Net Dimensions (LDH mm)
DB-VWC2-M4-FR3K	3U	6	2	1+0	1	1+0	35	8.2 kg	440 x 325 x 133
DB-VWC2-M4-FR4K	4U	8	3	1+1	1	1+1	41	9.8 kg	440 x 325 x 178
DB-VWC2-M4-FR6K	6U	14	5	1+1	1	1+1	56	12.6 kg	440 x 325 x 266
DB-VWC2-M4-FR8K	8U	15	10	1+1	1	1+1	170	16.8 kg	440 x 325 x 355
DB-VWC2-M4-FR14K	14U	21	18	1+1	1	1+3	170	29.4 kg	460 x 460 x 622
DB-VWC2-M4-FR26K	26U	42	36	1+1	2	1+3	260	54.6 kg	440 x 460 x 1154

Control	
RS232	D9 Female Connector
IP	TCP/IP, RJ45 connector
Video Processing	
Hardware Structure	Yes
Parrallel Processing	Yes
Digital Sampling	24bit
Color Sample	4:4:4
Resolution	Up to 3840*2160@30 input
Data Rate	10Gbps per input slot, 40Gbps per output

General	
Operating Temperatu	0° to +40° C
Storage Temperature	minus 10° to 70° C
Operating Humidity	10% to 85%, Non-condensing
Storage Humidity	10% to 90%, Non-condensing
MTBF	50,000 hrs

Note:

1. 3U does NOT support redundant PSU and redundant Control Card.

2. Control Card: all chassises are populated with 1x default control card, redundant control card is availabel to purchase.

3. PSU: All chassises are populated with 1x default PSU, redundant PSU is available to purchase.