

MIG-CL9600 series Video Wall Controller



MIG-CL9600 series is the latest pure hardware video wall controller from Magnimage. With a high-performance scaling engine, it is able to build up screens of multi-layers and pixel to pixel seamless mosaic. Based on advanced FPGA array and high speed digital busmatrix, its RGB 24bit/60Hz processing capacity will perfectly output any video or image at very low latency. It is designed for security monitoring, administrative management, military command, exhibition, research & education office, and multimedia conference.

On the input part, you can customize the machine with different input options from DVI, HDMI, SDI, DP, and IP camera. It supports $4K \times 2K / 60Hz$ input and EDID management.

On the output part, it supports customized output resolution, up to 6 layers per output channel, layer roaming, mosaic of different screen pixel pitch, background saving. These functions make MIG-CL9600 a great solution for big fixed installation of LCD/DLP/LED/projector mosaic.

∠ Features

- Pure FPGA hardware build-ups
- ∠ 6 independent layers per output
- ✓ Over 8 times scaling
- ${\cal D}$ Splice LED wall of different pixel pitch
- ✓ Internal 24 bit RGB processing
- $m{\it L}$ 60Hz real time processing
- ${\it L}^{\prime}$ Input EDID management
- ✓ Support HDCP1.4&2.2
- √ 4K×2K/8K×1K@60Hz input
- $^{\it C}$ Real time seamless switching
- $olimits_{\mathcal{L}}$ Layer grouping
- Z/ Support SDI output

- **17** 9 windows per output (Multipreview output)
- arDelta Random adjustment for the window's size and position
- $m{arDelta}$ Full screen roaming
- ${\it L}^{\prime}$ Customized output resolution
- Input/output monitoring
- arDelta Capture 4 background picture
- ${\it D}$ Dual Power supply backup
- Operation's real time monitoring
- Real time IP monitoring
- Projector edge blending splicing
- Fade effect among layers
- Caption and label

Video wall controller introduction

LCD screen

Mainly used for displaying the machine status information, including input/output cards' specification, firmware version, temperature, network setting etc.



Menu button

OK button, ≒eturn button, and knob. Browse the menu system with the coordination of LCD screen

Function button

Button 1~10, used for inputting the equipment configuration information, such as IP address and Subnet mask of network setting, etc. and manual switching for presets.



- 1 SDI outputs
- 5 4 HDMI inputs
- 9 IP monitoring
- 40
- 13 Frame lock input/output
- 2 DVI output
- 6 HDMI2.0 \DP1.2 input
- 10 Network control port
- 14 Power button

- 3 4 DVI inputs
- 7 DP 1.1 input
- 11 USB upgrade port
- 15 Dual power backup
- 4 VGA inputs
- 8 4 SDI input
- R\$232 control port

Control pattern and control interface

Control modes

3 ways to control: computer host control , iPad software control,

Computer host control: connect the controller with a computer via lan cable or RS232 cable, All operation will be done through the host coftware:

iPad control: install software to iPad, control the controller via software:

Button control: manually select and load the templates.

Operating Interface





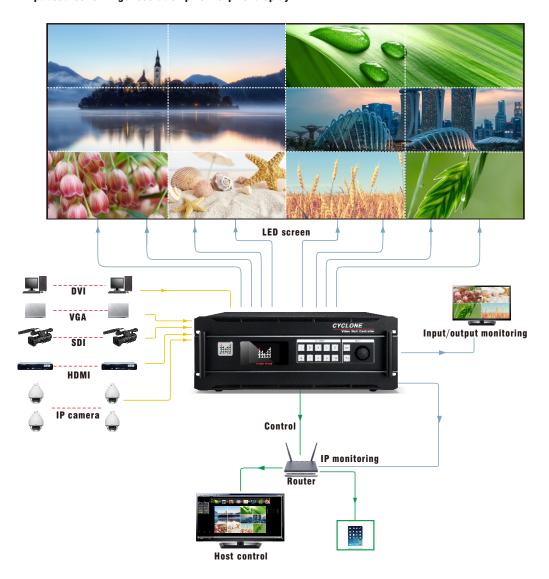


iPad control interface

∠ Main Characteristics & Application

Large resolution LED screen splicing

Large resolution LED Wall mosaic will be realized with corresponding sending cards and the machine's output customization. One MIG-CL9604 machine supports maximum 24 screens mosaic without frame missing or image tearing. It supports maximum 4K×2K/60Hz of DP or HDMI input source for large resolution pixel-to-pixel display.



4K×2K/60Hz Input

You can select the input cards according to your project demands.

2K input cards include DVI, HDMI, VGA, SDI, VGA+SDI(mixed module). 4K input cards include DP/HDMI(mixed module) and DP(2 ports).



Each port $4K \times 2K/60Hz$

Main Characteristics & Application

IP monitoring

By connecting the network control port, the IP monitor and the host computer into one local area network, you monitoring all the input and output status on the software.



🔲 🏻 6 Independent layers output per channel

Each DVI output channel is able to display 6 independent layers and one high definition background picture. The position, size and order of each layer can be set freely. Input source of any layer can also be set freely with the machine's inner video matrix function.



Main Characteristics & Application

Caption & Label

You can set the caption's size, color, moving speed, background color without PC or USB memory disk. You can also insert a picture to serve as a label.

Label function allows you mark the layers by words to help memorizing and selecting the right layer.



Edge blending for projection

One MIG-CL9604 controller supports maximum 24 projectors edge blending; Size, position and other parameters of the blending area can be adjusted via edge blending function.



${\it \square}$ Main Characteristics & Application

Multiviewer Output

One multiviewer output allows monitoring up to 9 input sources. The window layout can be customized.



${\it \it L}$ Technical specifications

Chassis specification				
Chasis	4U	14U		
Input channels	24	72		
Output channels	24	72		
Power voltage	110-240V			
Power frequency	50/60Hz			
Operation temperature	0~45°C			
Chasis N.W.(KG)	11.0	41.0		
Overall power consumption(W)	650	1900		
Dimension(mm)	482.6×371×177	482.6×570×645		

Input card						
Input card type	Port type	Port quantity	Resolution			
VGA	RGBHV	4	1920×1080/60Hz			
DVI	DVI-D	4	1920×1080/60Hz & EDID management			
НДМІ	HDMI1.3	4	1920×1080/60Hz			
2SDI+2VGA	3G SDI,RGBHV	2+2	1920×1080/60Hz			
SDI	3G SDI	4	1080i/60Hz,1080P/60Hz			
DP	DP1.1	2	3840×2160/30Hz			
IP	H.264	2	1920×1080/60Hz			
HDMI(4K)+DP(4K) HDMI2.0, DP1.2		1+1	3840 $ imes$ 2160/60Hz & EDID management, DP support 8K $ imes$ 1K/60Hz			
2SDI+2DVI 3G SDI,DVI-D		2+2	1920×1080/60Hz			

 $^{^{\}star}\text{MIG-CL9614}$ doesn't support DP and HDMI(4K) input at this time

Output card					
Output card type	Port type	Port quantity	Resolution (single DVI output)		
DVI	DVI-D (4 layers each port)	4	1920×1080/60Hz,2560×816/60Hz,1440×1440/60Hz&EDID management		
DVI	DVI-D (6 layers each port)	4	1920×1080/60Hz,2560×816/60Hz,1440×1440/60Hz & EDID management		
DVI	DVI-D (Preview output)	2	1920×1080/60Hz (Horizontally 9 windows)		
SDI	3G SDI (4 layers each port)	4	1080i/60Hz,1080P/60Hz		
IP	H.264	1	IP Monitoring		





Shenzhen Magnimage Technology Co., Ltd.

Address: 8F, Bld. F5, TCL International E City,#1001 Zhongshan Park Road, Nanshan, Shenzhen, China, 518052 Tel: 0755-8664 7651 Fax: 0755-8664 7650

Website: www.magnimage.com