

# MIG-CL9000 series

Led Video Wall Controller



# LED Video Wall Processor

## THE KING OF VIDEO AND IMAGE MOSAIC

Cyclone video wall controller is a high-performance image processing device with pure hardware architecture, which is specially designed for LED video wall with small pixel pitch. Cyclone video wall controller can realize seamless splicing and multi-layers functions, and it can be used in security monitoring, administration, military, exhibition, research and education. Cyclone video wall controller adopts hardware architecture on basis of high speed and capable FPGA array, and digital bus matrix. For all kinds of input sources, cyclone series video wall controller ensures original signal recovery by adopting RGB 24bits/60Hz internal processors, ensures high quality image output without delay and supports seamless splicing for multi-screens outputs by using a built-in-high-performance image scaling engine.

It adopts dual-DVI copy output, one DVI is for screen, another DVI is for monitor, or two outputs to send card together, support sending cards cascade, custom output resolution, adopting to a variety of LED screen resolution to achieve pixel to pixel mosaic display. It supports different pixel pitch LED mosaic at the same time. All output ports can be built-in pixel to pixel display of HD background.



# MIG-CL9000 series Controller

MIG-CL9000 series is a powerful video wall controller, it is the central processor device for big screen splicing system, to achieve different formats input sources to be displayed in multiple display terminals, functions include arbitrary splice, zooming, windows, overlap, etc. It adopts high speed FPGA and number bus matrix as the basic hardware structure, and has laid a stable advantage, at the same time it adopts RGB 24 BIT/60Hz real time processing internally, ensuring signal high reduction performance; the internal high performance zooming engine supports multi-screen output seamless splicing, ensuring output image clear, smooth, no delay. Depth module design supports AV, VGA, DVI, HDMI, SDI, IP, DP(4K) inputs, to achieve input signal EDID management. Output customized resolution is for all kinds of LED pixel to pixel splicing display. All series products are equipped with after sales support module, supporting USB upgrade and network, RS232 serial port control, convenient for technical support and after sales maintenance. System configuration is flexible, the input and output is available for different choices, currently 3U,4U,8U cabinets are for choosing. MIG-CL9000 series is widely used in multi-media conference hall, multi-function room, directing and dispatching center, inspection center, theater, television studio, exhibition hall in government, traffic, hydropower, medicare, education, radio and television, malls and various industries.

## FEATURES

- PURE HARDWARE BUILD-UPS
- 4 SEPARATED LAYERS PER OUTPUT
- OVER 8 TIMES SCALING
- SPLICE LED WALL OF DIFFERENT PIXEL PITCH
- INTERNAL 24 BIT RGB PROCESSING
- 60HZ REAL TIME PROCESSING
- INPUT EDID
- 4KX2K INPUT
- REAL TIME SEAMLESS SWITCHING
- LAYER GROUPING
- LAYER SEAMLESS SWITCHING
- SUPPORT HDBaseT output
- 9 WINDOW OUTPUT PER CHANNEL
- EASY CHANGE FOR THE WINDOW'S SIZE AND POSITION FULL SCREEN ROAMING
- CUSTOMIZED OUTPUT RESOLUTION
- INPUT/OUTPUT MONITORING
- HIGH DEFINITION BACKGROUND OF PIXEL TO PIXEL DISPLAY
- DUAL POWER SUPPLY BACKUP
- OPERATION'S REAL TIME MONITORING
- REAL TIME IP MONITORING
- PROJECTOR EDGE BLENDING SPLICING



# MIG-CL9000 series Controller

## CHASSIS TYPE AND SPECIFICATION

TYPE	MIG-CL9003-A	MIG-CL9004-A	MIG-CL9008-A
Input ports quantity	5	8	9
Output ports quantity	4	4	11
Control board quantity	1	1	1

## MACHINE SPECIFICATION

Power supply	100-240 AC 50/60Hz	100-240 AC 50/60Hz	100-220 AC 50/60Hz
Power consumption	max 180W	max 180W	max 650W
Operation temperature	0-45°C	0-45°C	0-45°C
Product dimension	482.6x371x133mm	482.6x371x177mm	482.6x355x430.5mm
Net weight	9.6Kg	11Kg	18.85Kg

## OPERATING INTERFACE



3 control modes includes computer host control, Ipad control, and key control.

Computer host control : Achieved by connecting the machine with a computer via network cable or RS232 cable. Any operation will be done through the host software.

Ipad control: Achieved by the software designed for Ipad.

Key control: To control and select all the template manually.

# MIG-CL9000 series Controller

## CHASSIS SPECIFICATION

CHASSIS	3U	4U-A	4U-B	4U-C	8U
INPUT CHANNELS	20	32	24	16	36
OUTPUT CHANNELS	16	16	24	32	44
POWER VOLTAGE	110-240V				
POWER FREQUENCY	50/60Hz				
OPERATION TEMPERATURE	0-45°C				
CHASSIS N.W. (KG)	9.6	11.0	11.0	11.0	18.85
OVERALL POWER CONSUMPTION (W)	180	350	350	350	700
DIMENSION	482.6*371*133	482.6*371*177	482.6*371*177	482.6*371*177	482.6*355*430

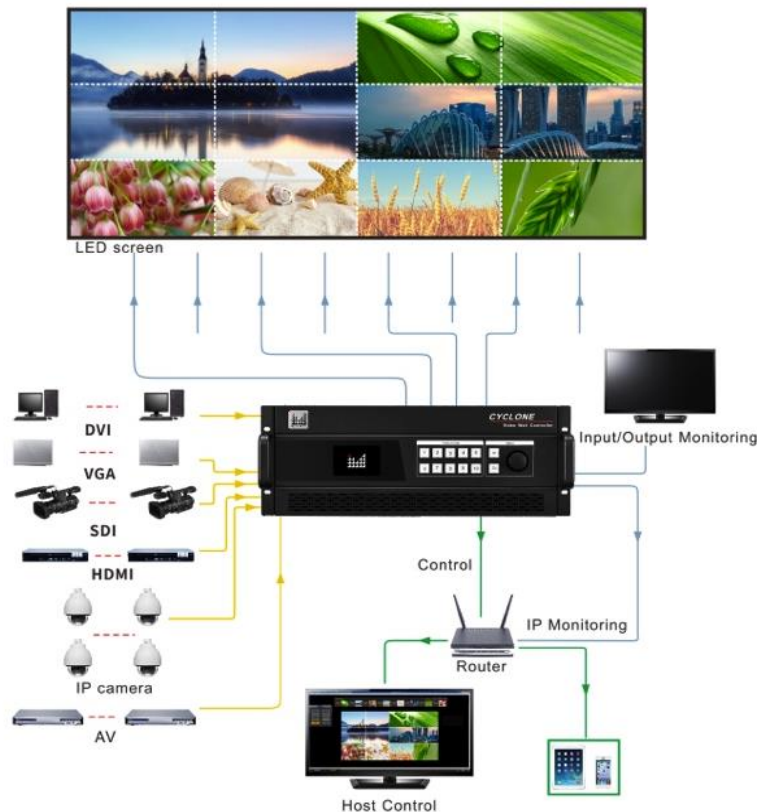
## CARD TYPE AND SPECIFICATION

PORTS	PORT TYPE	QUANTITY	RESOLUTION
AV	PAL, NTSC	8	576i/480i
VGA	RGBHV	4	1920*1080/60Hz
DVI	DVI-D	4	1920*1080/60Hz&EDID management
SDI	3G SDI	4	1080i/60Hz, 1080P/60Hz
HDMI	HDMI 1.3	4	1920*1080/60Hz
DP	DP1.1	2	3840*1080/60Hz&EDID management
IP	H.264	2	1920*1080/60Hz
2SDI+2VGA	3G SDI, RGBHV	2+2	1920*1080/60Hz
2SDI+2DVI	3G SDI, DVI-D	2+2	1920*1080/60Hz
HDMI(4K)+DP(4K)	HDMI2.0, DP1.2	1+1	3840*2160/60Hz&EDID management DP support 8K*1K/60Hz

OUTPUT CARD TYPE	PORT TYPE	QUANTITY	RESOLUTION
DVI	DVI-D (4 layers each port)	2x2	1024x768/60Hz 1366x768/60Hz 1440x900/60Hz 1440x1440/60Hz
DVI	DVI-D (2 layers each port)	4x1	1280x1024/60Hz 1680x1050/60Hz 1600x1200/60Hz 1920x1080/60Hz
HDBaseT	HDBaseT (4 layers each port)	2	2560x816/60Hz Customized output resolution, horizontal max 2560, vertical max 2560
DVI	DVI-D	2	1920x1080/60Hz
IP	H.264	1	IP monitoring

# MIG-CL9000 series Controller

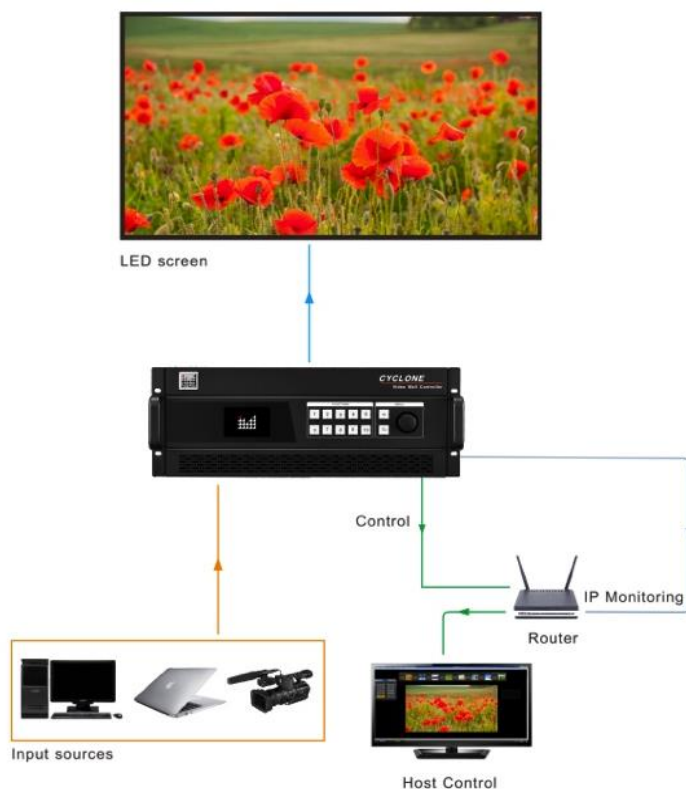
## HIGH RESOLUTION LED WALL SPLICING



High resolution LED Wall splicing will be realized with corresponding sending cards and the machine's output customization. One 4U chassis machine supports 32 times splicing at most. One 3U chassis machine supports 16 times splicing at most. No frame drop and image tear. Supports 4Kx2K DP input and high resolution pixel-to-pixel display.

# MIG-CL9000 series Controller

## IP MONITORING



By connecting the network control port, the IP monitor and the host computer into one local area network, it is able to monitor all the input and output by the host software.

# MIG-CL9000 series Controller

## 4 INDEPENDENT LAYERS OUTPUT BY SINGLE CHANNEL

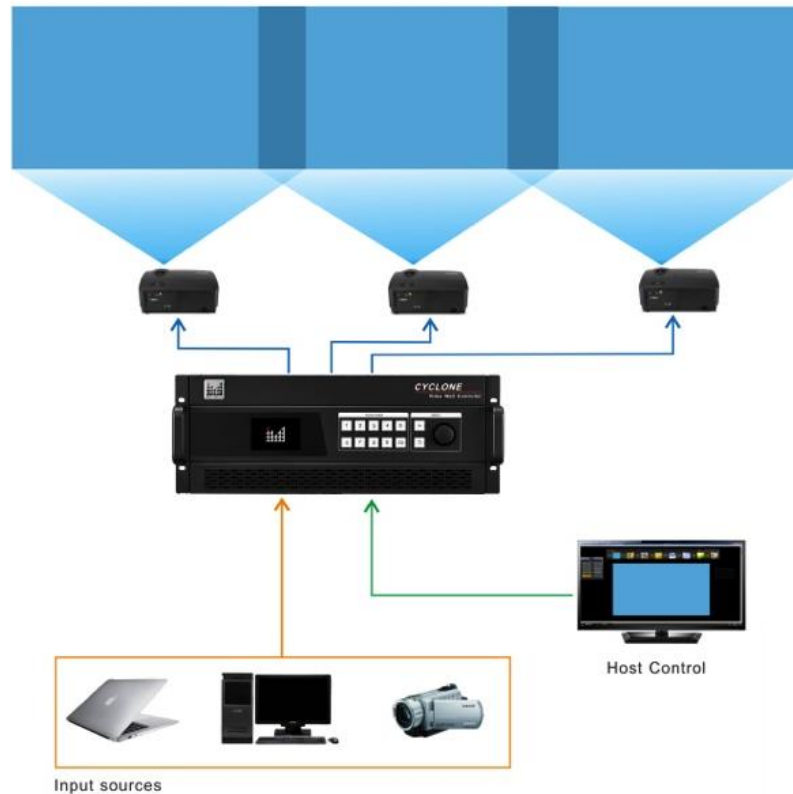


One DVI output channel is able to display 4 independent layers and one high definition background. The position, size and order of each layer can be set freely. Input source of any layer can also be set freely with the machine's inner video matrix.



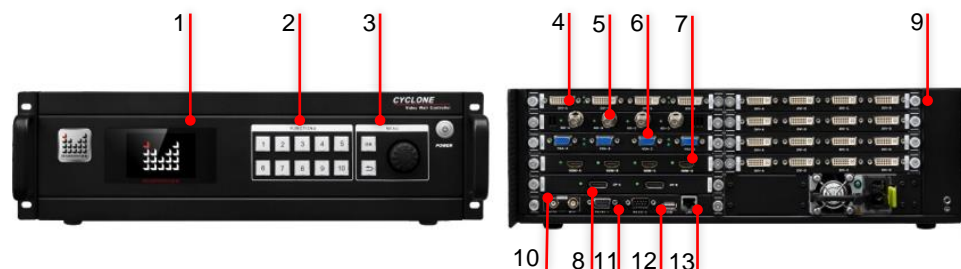
# MIG-CL9000 series Controller

## PROJECTOR EDGE BLENDING SPLICING



One 4U case controller supports 32 projectors splicing at most; one 3U case controller supports 16 projectors splicing at most. Size, position and other parameters of the blending part can be changed via edge blending function.

# MIG-CL9003 Controller



## CHASSIS TYPE AND SPECIFICATION

	MIG-CL9003-A
Input ports quantity	5
Output ports quantity	4
Control board quantity	1
Power supply	100-240 AC 50/60Hz
Power consumption	max 180W
Operation temperature	0-45°C
Size	482.6x371x133mm
Weight	9.6Kg

## MIG-CL9003-A Controller

**SIZE:** 19"x14.6"x5.23" (482.6x371x133mm)

**WEIGHT:** 21.16 lb (9.6 kg)

**ORDER CODE:** UNIPROMIGCL903

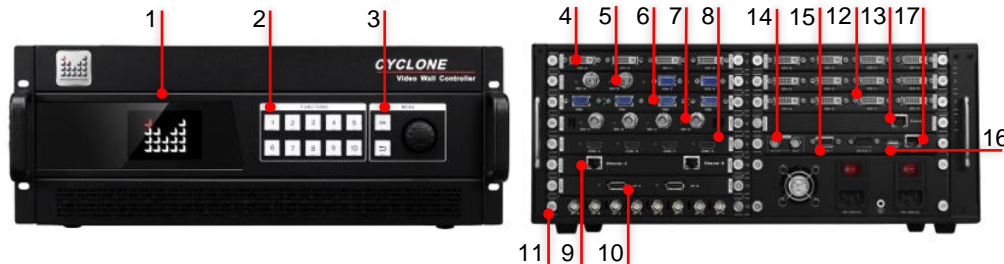
## INCLUDING ACCESSORIES

Power Cable	1
USB Memory	1
DVI Cable	2
Certificate	1
Cable	2
User Manual	1

## INTERFACE DESCRIPTION

1	LCD Screen: display the machine's status information, including input/output board, hardware version, temperature, network setting, etc.
2	Functions Button: Button 1-10 are for machine's setting like IP, subnet mask, mode shifting.
3	Menu Operation: "OK", "<" and the Rotate key are used to read the menu on the LCD screen.
4	4x DVI inputs
5	4x SDI inputs
6	4x VGA inputs
7	4x HDMI inputs
8	2x DP inputs
9	4x DVI outputs
10	Frame lock plugs
11	RS 232 Control Port
12	USB Upgrade Port
13	LAN

# MIG-CL9004 Controller



## CHASSIS TYPE AND SPECIFICATION

	MIG-CL9004-A
Input ports quantity	8
Output ports quantity	4
Control board quantity	1
Power supply	100-240 AC 50/60Hz
Power consumption	max 180W
Operation temperature	0-45°C
Size	482.6x371x177mm
Weight	11Kg

## MIG-CL9004-A Controller

**SIZE:** 19"x14.6"x6.96" (482.6x371x177mm)

**WEIGHT:** 24.25 lb (11 kg)

**ORDER CODE:** UNIPROMIGCL904

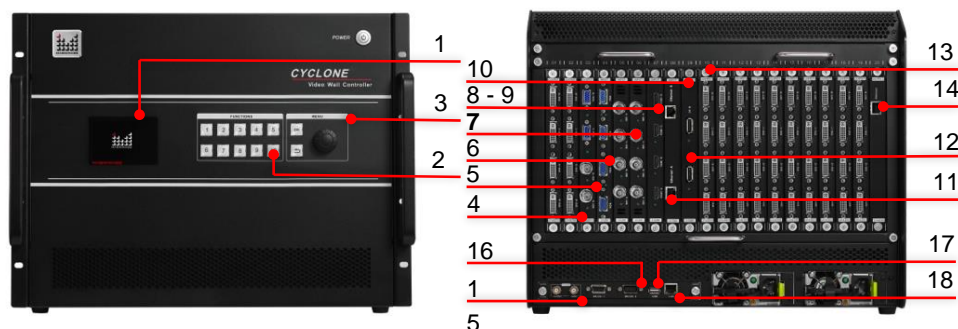
## INCLUDING ACCESSORIES

Power Cable	2
USB Memory	1
DVI Cable	2
Certificate	1
Cable	2
User Manual	1

## INTERFACE DESCRIPTION

1	LCD Screen: display the machine's status information, including input/output board, hardware version, temperature, network setting, etc.
2	Functions Button: Button 1-10 are for machine's setting like IP, subnet mask, mode shifting.
3	Menu Operation: "OK", "<-" and the Rotate key are used to read the menu on the LCD screen.
4	4x DVI inputs
5	2x SDI inputs, 2x VGA inputs
6	4x VGA inputs
7	4x SDI inputs
8	4x HDMI inputs
9	2x Network inputs
10	2x DP inputs
11	8x AV inputs
12	4x DVI outputs
13	IP monitoring
14	Frame lock plugs
15	RS 232 Control Port
16	USB Upgrade Port
17	LAN

# MIG-CL9008 Controller



## CHASSIS TYPE AND SPECIFICATION

	MIG-CL9008-A
Input ports quantity	9
Output ports quantity	11
Control board quantity	1
Power supply	100-220 AC 50/60Hz
Power consumption	max 650W
Operation temperature	0-45°C
Size	482.6x355x430.5mm
Weight	18.85Kg

## MIG-CL9008-A Controller

**SIZE:** 19"x13.97"x16.94" (482.6x355x430.5mm)

**WEIGHT:** 41.55 lb (18.85 kg)

**ORDER CODE:** UNIPROMIGCL908

## INCLUDING ACCESSORIES

Power Cable	2
USB Memory	1
DVI Cable	2
Certificate	1
Cable	2
User Manual	1

## INTERFACE DESCRIPTION

1	LCD Screen: display the machine's status information, including input/output board, hardware version, temperature, network setting, etc.
2	Functions Button: Button 1-10 are for machine's setting like IP, subnet mask, mode shifting.
3	Menu Operation: "OK", "<-" and the Rotate key are used to read the menu on the LCD screen.
4	4x DVI inputs
5	4x DVI inputs
6	2x SDI inputs, 2x VGA inputs
7	4x VGA inputs
8	4x SDI inputs
9	4x SDI inputs
10	4x HDMI inputs
11	2x IP monitoring
12	2x DP inputs
13	4x DVI outputs
14	IP monitoring
15	Frame lock plugs
16	RS 232 Control Port
17	USB Upgrade Port
18	LAN