V8 Series Video Switcher

User Manual V1.1

⚠ Before using the product, please read this manual and keep it for future reference.

MAGNIMAGE

V8 Series

Statement

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Briefs

Thanks for your purchasing our MIG-V8 switcher. Do hope you can enjoy the experience of the product performance. The design of the switcher conforms to international and industry standards. But if with improper operation, there will be a personal injury and property damage. In order to avoid the dangerous, please obey the relevant instructions when you install and operate the product.

Trade Mark

- VGA and XGA are the trademarks of IBM.
- VESA is a Video Electronics Standards Association's trademark.
- HDMI、HDMI mark and High-Definition Multimedia Interface are all from HDMI Licensing LLC.
- Even if not specified company or product trademarks, trademark has been fully recognized.

About The Software

Any acts such as change, decompile, disassemble, decrypt or reverse engineer the software installed in the product are illegal.

Key Features

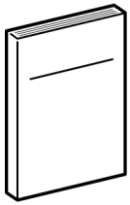
- 8 PGM outputs, 16 scaled layers at any position
- 8 AUX outputs, support mosaic and scaling
- 3 AUX loop outputs
- 1 Multi-previewer for monitoring the real-time input and output sources, customized window layout
- 1 IP output for real-time monitoring
- 36 optional inputs with various 2K or 4K input modules
- 4K*2K/60Hz 4:4:4 compliant
- HDCP 1.4 & 2.2 compliant
- Background captures
- EDID management
- Image crop，layer zoom function
- Text overlay
- Edge blending for projector
- F-lock for multiple cascading
- Dual redundant power supplies
- Works with MIG-H8 or MIG-H6

Using Directions

Accessories Included

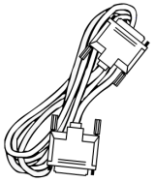
MIG-V8 accessories

User manual

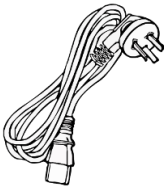


Certificate

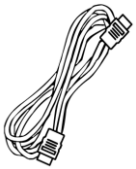
DVI line ×2



Power line ×2



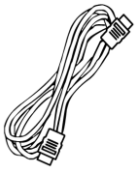
DP line×1



Network cable×2

USB disk×1

HDMI line×1



Safety Instructions

- Please use the correct power voltage, ranging 100～240V AC, 50/60Hz.
- Make sure the power is cut whenever pull out any cable from the machine
- Make sure the power is off and the signal cables are out before you plug in or pull out any hardware device.
- Before you use the product, please cut the power and discharge your static electricity by touching the ground surfaces.
- Please use the machine in clean, dry and ventilated environment. Never use the machine in hot or humid environment.
- Keep the product away from fire, water or any dangerous environment.
- Please do not repair the machine yourself by opening the machine’s box.
- If there is any unusual smell or smoke, please turn off the machine at once and contact the seller.

Function Profile

Overview

MIG-V8 is the latest Magnimage high-performance video switcher. Based on high-speed FPGA and digital matrix bus structure, it is a 24 bits/60Hz processing system. With an advanced scaling engine, it supports seamless mosaic for up to 16 screens in excellent image quality and low latency. There are 8 PGM outputs, 8 AUX outputs, 3 AUX loop outputs and 1 Multi-previewer.

Mixed input matrix design allows you to customize the machine from 2K and 4Kx2K/60Hz 4:4:4 options. It allows up to 9 input boards.. It also supports real-time video monitoring for input and output.

You can control MIG-V8 via software or console(MIG-H6 or MIG-H8) for fade in/out switching of various layers and presets. This switcher is designed for auto shows, corporate events, product release and live shows.

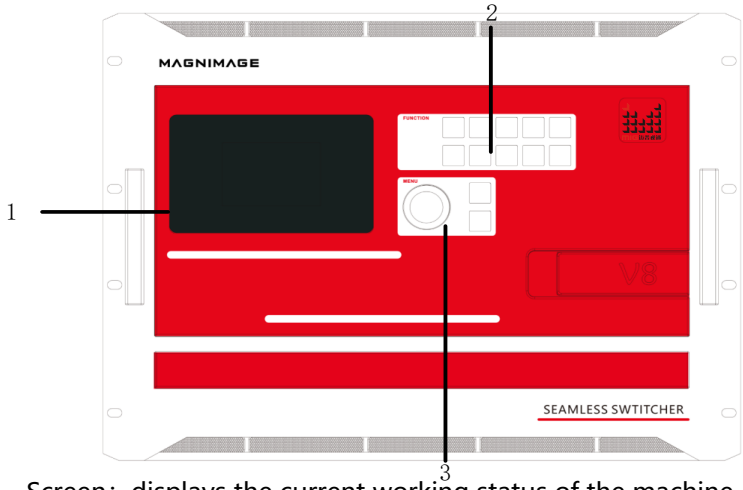
Technical Specification

Input signal		
Input	**Amount**	**Standards**
VGA	4	VESA
DVI	4	VESA&Custom
HDMI	4	HDMI-1.3
SDI	4	480i、576i、720p、1080i/p（3G SDI）
SDI/VGA	SDI×2、VGA×2	Same as SDI and VGA
SDI/DVI	SDI×2、DVI×2	SDI：480i、576i、720p、1080i/p（3G SDI） DVI：VESA
HDMI/DP	HDMI×1、DP×1	HDMI2.0、DP1.2，4K2K/60Hz&Custom
DP	2	DP1.1，4K×1K/60Hz&Custom

Output signal		
Output port	**Amount**	**Resolution**
DVI（PGM）	8	1920×1080/60Hz
DVI（AUX）	8	1920×1080/60Hz
DVI（Multiviewer）	1	1920×1080/60Hz
DVI（AUX loop）	3	1920×1080/60Hz

Power & work condition	
Input power	100～240VAC，50/60Hz
Work temperature	0~45℃
Work humidity	10% -90%

The Front Panel

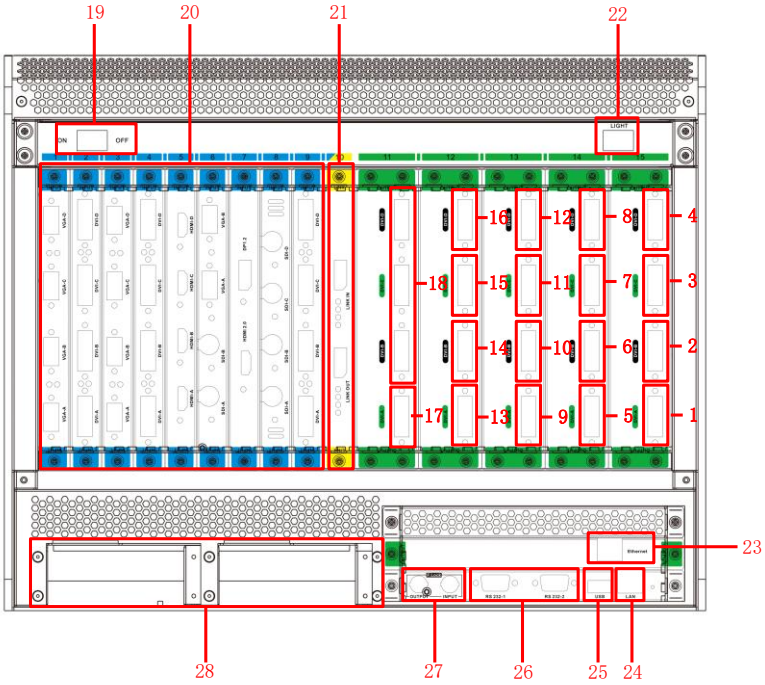


1—Screen：displays the current working status of the machine , can browse input information、electrical status, etc.

2—Function buttons：Under specific menu ,realize customization function

3—Main buttons :can browse or set menu contents ,Including OK button ,return button and knob.

The Back Panel

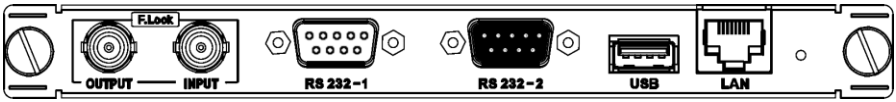


1- PGM output 1
2- AUX output 1
3- PGM output 2
4- AUX output 2
5- PGM output 3
6- AUX output 3
7- PGM output 4
8- AUX output 4
9- PGM output 5
10- AUX output 5
11- PGM output 6
12- AUX output 6
13- PGM output 7
14- AUX output 7
15-PGM output 8
16- AUX output 8
17- Multi-previewer output
18- AUX loop output
19- Power switch
20- Input area, 2K/4K options
21-Link board for cascade and loop the signal
22- Light switch
23- IP monitoring port
24- IP control port
25- USB port for upgrading
26- RS232
27- F-lock for synchronization between multiple units
28-Power port

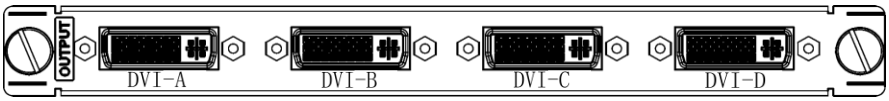
MIG-V8 Board

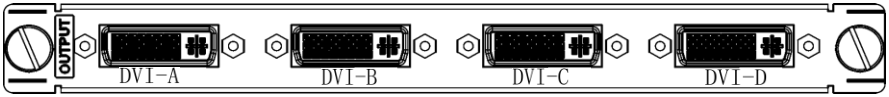
The control board and output board are included in a standard unit. You can customize the input boards based on your project demand.
The output board has 4 types of output port, including PGM output, AUX output, AUX loop output and Multi-previewer output.

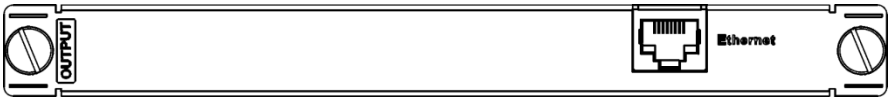
Control Board

Control Board	
	
F-Lock	F-lock for synchronization between multiple units
RS 232-1/2	Control port for future function
USB	USB port for software upgrading
LAN	LAN port for connecting the software or console

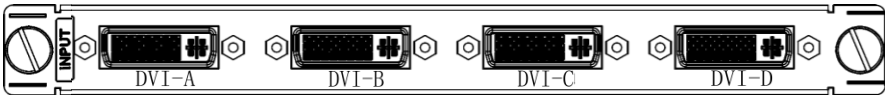
Output Board

MIG-V-OUTOSD	
	
DVI port	Port A is Multiviewer output, port B,C,D are AUX loop outputs
Output resolution	1920×1080@60Hz

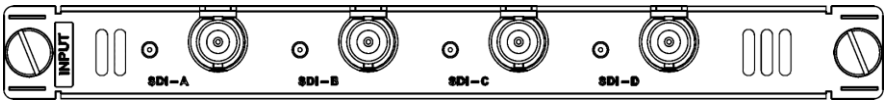
MIG-V-OUTSW	
	
DVI port	Port A and C are PGM outputs, port B and D are AUX loop outputs
Output resolution	1920×1080@60Hz

MIG-V-OUTIP: [IP monitoring]	
	
Operation mode	This output board is only for sending the real-time input and output image to the software or console
Board explanation	This board is designed for IP monitoring, support monitoring 16 input sources

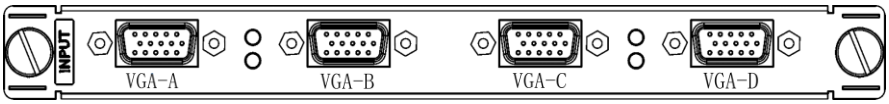
Input Board

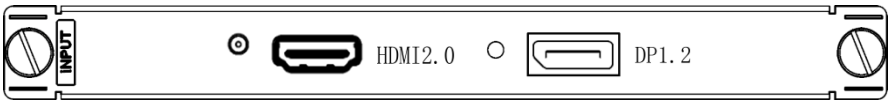
MIG-V-INDVI: [DVI×4 input board]	
	
Signal format	VESA-DVI-D digital signal，support EDID management
Port	24+5 pin

MIG-V-INHDMI: [HDMI×4 input board]	
Signal format	EIA/CEA-861, HDMI-1.3
Port	HDMI, type A

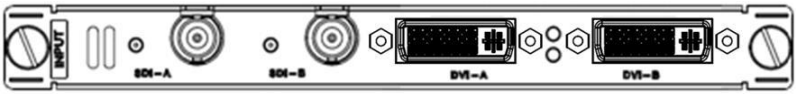
MIG-V-INSDI: [SDI×4 input board]	
	
Signal format	480i、576i、720p、1080i/p(3G SDI)
Port	BNC

MIG-V-INDP: [DP×2 input board]	
Signal format	DP1.1，3840×1080@60Hz
Port	Full size 20 pin

MIG-V-INVGA: [VGA×4 input board]	
	
Signal format	VESA
Port	15 pin of D-sub

MIG-V-INDP12: [HDMI×1，DP×1 input board]	
	
Signal format	HDMI2.0，DP1.2，3840×2160@60Hz
Port	HDMI type A and full size 20 pin

MIG-V-INSDIVGA: [SDI×2，VGA×2 input board]	
Signal format	2 SDI+2 VGA
Port	BNC and 15 pin of D-sub

MIG-V-INSDIDVI: [SDI×2，DVI×2 input board]	
	
Signal format	2 SDI+2 DVI
Port	BNC and 24+5 pin

MIG-V8 Menu

The LCD screen of this machine will tell the current information when you do any setting. If there is not any setting or the setting is overtime, the machine will stay in the default status.

How To Use The Buttons

In the front panel of MIG-V8, there are MENU and FUNCTION sections.

MENU

There are "OK", "↩" buttons and one knob in this section.

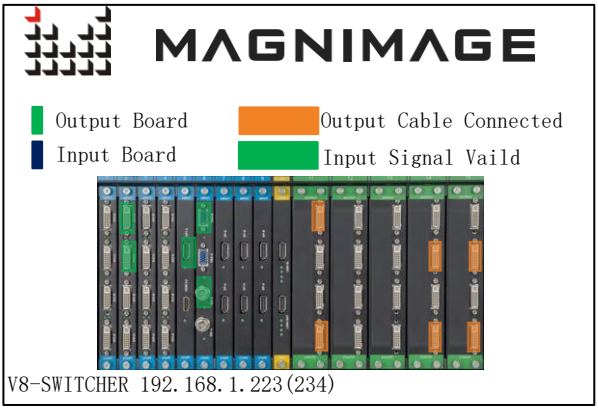
In the default status, press the "OK" button will enter the main menu. You can rotate the knob and press "OK" to enter the sub-menu setting. "↩" is for returning.

FUNCTION

There are 10 number buttons in this section. These number buttons are for setting IP address.

Default Status

After turning on MIG-V8, the screen will show the default window as the below image.



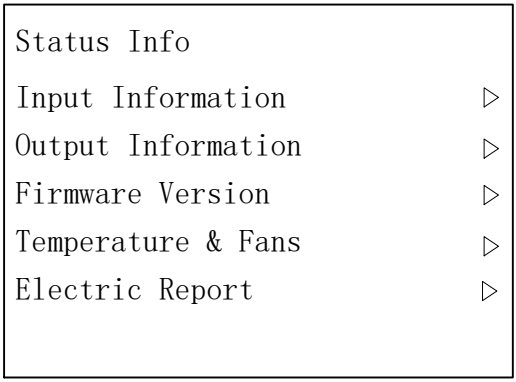
Input & output board	Green part is the output board, blue part is the input board
Input port connection	Turn green when there is available input
Output port connection	Turn orange when there is available output

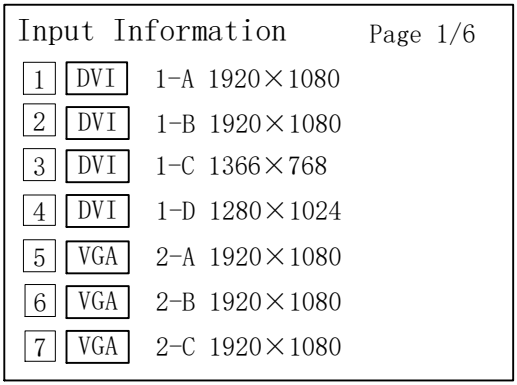
MIG-V8 Main Menu

Press “OK” button, the LCD screen will enter to this window:

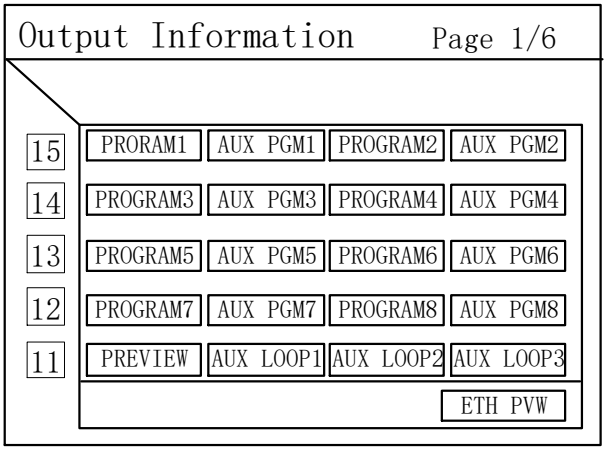
There are5 setting options. Press “OK” for entering, “ ” for returning.

Status Info





Input Information	Tells the input board information, input connection and resolution



Output Information	Tells the output type

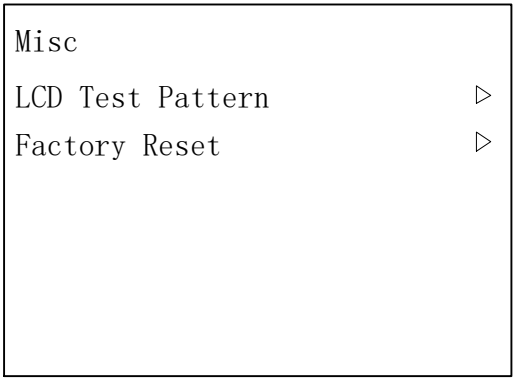
Firmware Version X008-V8-Sep 6 2018		Page 1/2
15	Output	A1585-F9246-9246
14	Output	A1585-F9246-9246
13	Output	A1585-F9246-9246
12	Output	A1585-F9246-9246
11	Output	A1585-F9307-9406
16	Output	A1585-FACC8-ACC8
10	Input	A1585-F54DA
9	Input	A1585-FA0B8
8	Input	A1585-F9003

Temperature & Fans			Page 1/2
15	Output	43℃	System Board 28℃ 34℃
14	Output	45℃	Fan OK
13	Output	43℃	Fan OK
12	Output	44℃	Fan OK
11	Output	43℃	Fan OK
16	Output	32℃	Fan OK
10	Input	No Date	
9	Input	35℃	
8	Input	37℃	

Electric Report			Page 1/2
15	Output	Current OK Voltage OK	
14	Output	Current OK Voltage OK	
13	Output	Current OK Voltage OK	
12	Output	Current OK Voltage OK	
11	Output	Current OK Voltage OK	
16	Output	Current OK Voltage OK	
10	Input	Board Not Exist	
9	Input	Current OK Voltage OK	
8	Input	Current OK Voltage OK	

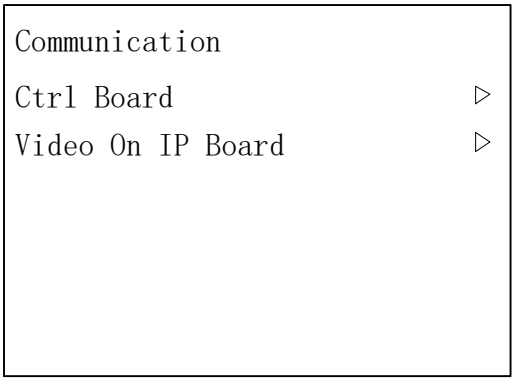
Firmware Version	Tells the firmware information of the boards
Temperature & Fans	Tells the temperature and fans status of the boards
Electric Report	Real-time electric status of the boards

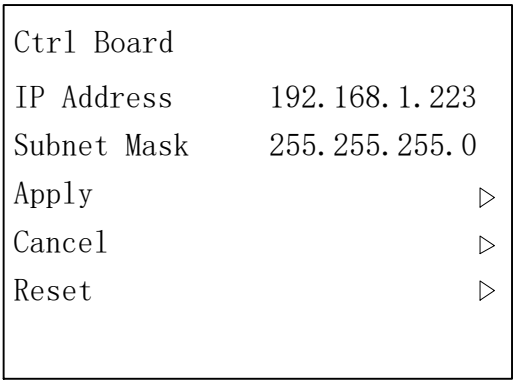
Misc

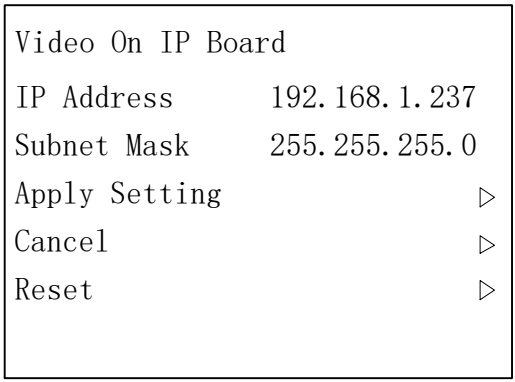


LCD Test Pattern	Test the LCD screen of V8
Factory Reset	Set the machine back to factory status

Communication

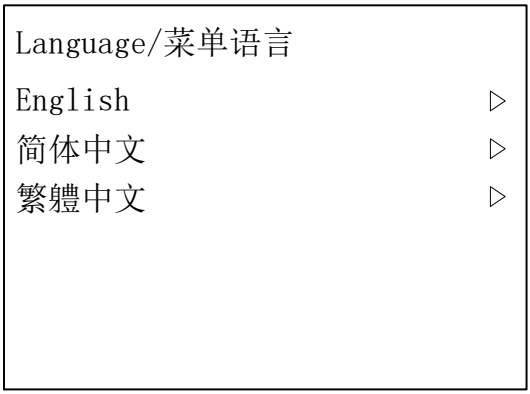






Communication	Ctrl Board	To connect MIG-V8 with software or console
	Video On IP Board	To display the real-time image of input and output
	IP Address	Default address Control board 192.168.1.223 IP board 192.168.1.237
	Subnet Mask	Default address 255.255.255.0
	Apply Setting	Apply the current setting
	Cancel	Cancel the current IP Address and Subnet Mask setting
	Reset	Set all configuration back to default status

Language/菜单语言 Menu



English	English
简体中文	Simplified Chinese
繁体中文	Traditional Chinese

About Magnimage Menu

About Magnimage

Websit

Wechat(Chinese)

Facebook

http://www.magnimage.com/cn/

Website	http://www.magnimage.com
Wechat（Chinese）	Magnimage
Facebook（English）	Magnimage-ENG

Warranty

The Whole Unit Warranty

- One year (from the buying date);
- If the invoice is lost, the 60 days after the production date will be the warranty start date for the product.

Non-warranty Provisions

- The machine soaking and collisions produced besmirch or surface scratches and other abnormal using causes of malfunction or damage;
- Demolition machine or modification, which is not to be agreed by our company;
- Using in the not specified used working conditions, resulting in fault or damage (such as high temperature, low voltage or unstable etc.);
- Force majeure (such as fire, earthquake, etc.) or natural disasters (like lightning, etc) caused the fault or damage;
- Beyond the product warranty.