

# MIG-V6 seamless switcher

## User Manual V1.1



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

# MAGNIMAGE

## **Statement**

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The product specifications and information mentioned in this manual is just for reference, will not give prior notice if there is any update. Unless there is a special agreement, it is just used as a guideline. All the statements or information in this manual shall not constitute any form of guarantee.

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## **Briefs**

Thanks for your purchasing our MIG-V6 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.

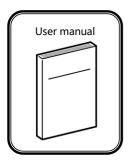
## **Key Features**

- 4 PGM outputs, 16 scaled layers at any position
- 4 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
- 24 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-V6 accessories

















## 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-V6 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 8 screens in excellent image quality and low latency. There are 4 PGM outputs, 4 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 6 input boards.. It also supports real-time video monitoring for input and output.

You can control MIG-V6 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**

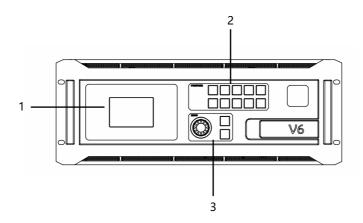
Input signa	ıl	
Input	Amount	Standards
VGA	4	VESA
DVI	4	VESA
HDMI	4	HDMI-1.3
SDI	4	480i、576i、720p、1080i/p(3G SDI)
SDI/VGA	SDI×2、VGA×2	Same as SDI and VGA
SDI/DVI	SDI×2、DVI×2	SDI: 480i, 576i, 720p, 1080i/p (3G SDI)
		DVI : VESA
HDMI/DP	HDMI×1、DP×1	HDMI2.0、DP1.2, 4K2K/60Hz&Custom
DP	2	DP1.1, 4K×1K/60Hz&Custom

Output signal		
Output port	Amount	Resolution
DVI (PGM)	4	1920×1080/60Hz
DVI (AUX)	4	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°C	
Work humidity	10% -90%	

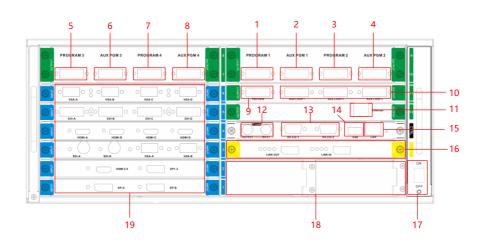
# MIG-V6

## 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 11- IP monitoring port

2- AUX output 1 12- F-lock for synchronization between multiple units

3- PGM output 2 13- RS232

4- AUX output 2 14- USB port for upgrading

5- PGM output 3 15- IP control port

6- AUX output 3 16- Link board for cascade and loop the signal

7- PGM output 48- AUX output 417- Power switch18- Power port

9- Multi-previewer output 19- Input area, 2K/4K options

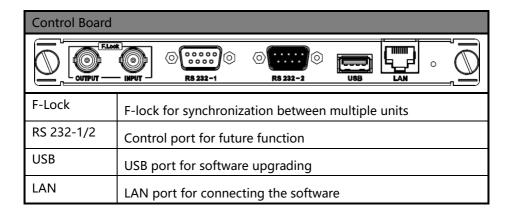
10- AUX loop output

### MIG-V6 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**



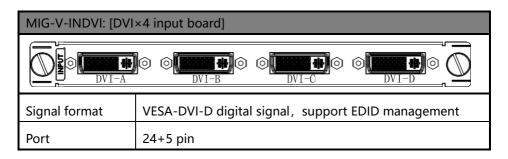
# **Output Board**

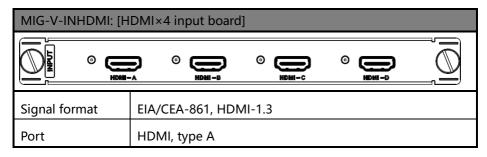
MIG-V-OUTOSD	
DVI-A	O O DVI-B O DVI-C DVI-D
DVI port	Port A is Multiviewer output, port B,C,D are AUX loop
	outputs
Output resolution	1920×1080@60Hz

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

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

# **Input Board**





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

MIG-V-INDP: [DP×2	input board]
I LANGE TO A CONTROLL OF THE CONTROL	○
Signal format	DP1.1, 3840×1080@60Hz & Custom
Port	Full size 20 pin

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

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

MIG-V-INSDIVGA: [SDI×2, VGA×2 input board]		
	VGA-A S OF VGA-B	
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-V6 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-V6, 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-V6, 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-V6 Main Menu

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



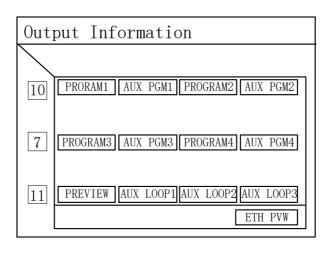
There are 5 setting options. Press "OK" for entering, " " for returning.

## **Status Info**

Status Info	
Input Information	$\triangleright$
Output Information	$\triangleright$
Firmware Version	$\triangleright$
Temperature & Fans	$\triangleright$
Electric Report	$\triangleright$

Input In	formation	Page 1/6
1 DVI	1-A 1920×1080	
2 DVI	1-B 1920×1080	
3 DVI	$1-C 1366 \times 768$	
4 DVI	$1-D$ $1280 \times 1024$	
5 VGA	2-A 1920×1080	
6 VGA	2-B 1920×1080	
7 VGA	2-C 1920×1080	

 $\begin{array}{c} \text{ Tells the input board information, input connection} \\ \text{ and resolution} \end{array}$ 



Output Information Tells the output type

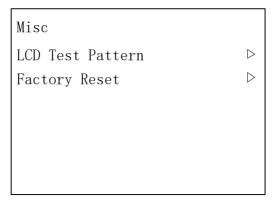
Firmw	are Versi	on X000e-V6-Sep 6 2018	Page	1/2
10	Output	A1507 F0946 0946		
10		A1587-F9246-9246		
11	Output	A1587-F9307-9406		
12	Output	A1587-FACC8-ACC8		
7	Output	A1587-F9246-9246		
6	Input	A1587-F54DA		
5	Input	A1587-FA0B8		
4	Input	A1587-F9003		

Tem	peratur	e & Fans	Page 1/2
10 11 12	Output Output Output	45℃ 43℃ 44℃	System Board 28°C 34°C Fan OK Fan OK Fan OK
7 6 5 4	Output Input Input Input	32°C No Date 35°C 37°C	Fan OK Fan OK

Elec	Electric Report Page 1/2		
10	Output	Current OK	Voltage OK
11	Output	Current OK	Voltage OK
12	Output	Current OK	Voltage OK
7	Output	Current OK	Voltage OK
6	Input	Board Not E	Exist
5	Input	Current OK	Voltage OK
4	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 V6
Factory Reset	Set the machine back to factory status

## Communication

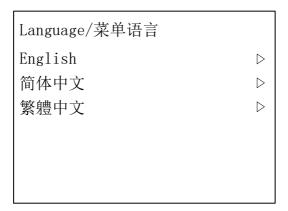
Communication	
Ctrl Board	$\triangleright$
Video On IP Board	$\triangleright$

Ctrl Board	
IP Address	192. 168. 1. 223
Subnet Mask	255. 255. 255. 0
Apply	$\triangleright$
Cancel	$\triangleright$
Reset	$\triangleright$

Video On IP Board		
IP Address	192. 168. 1. 237	
Subnet Mask	255. 255. 255. 0	
Apply Setting ▷		
Cancel	$\triangleright$	
Reset	$\triangleright$	

	Ctrl Board	To connect MIG-V6 with software or console
	Video On IP Board	To display the real-time image of input and
		output
	Communication Subnet Mask Apply Setting	Default address Control board 192.168.1.223
		IP board 192.168.1.237
Communication		Default address 255.255.255.0
		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.