MVB8S 2IN1 Video Processor

Specifications V3.8

Shenzhen Mooncell Electronics Co., Ltd

1 Product Overview

Product Introduction

➢ **MVB8S is a LED video control device with powerful video signal acquisition and processing capabilities, maximum support for 3840 x 2160 @ 60Hz, RGB444 HD video signal input acquisition, can provide efficient audio and video processing for computers and other devices.**

➢ **MVB8S supports 5-channel video input, including HDMIX2, DVI, DP, VGA, etc. Meanwhile, it supports flexible switching between multiple signals, arbitrary scaling and cropping of the video source, and powerful video signal reception, ultra-high-definition image processing and transmitting capabilities.**

➢ **MVB8S can support the widest 8192 pixels or the highest 3840 pixels LED display. At the same time, MVB8S is equipped with a series of rich and practical functions, providing flexible screen control and high-quality image display, which can be perfectly applied to large and medium-sized LED displays.**

➢ **The MVB8S is equipped with 8-channel network port output, with a data transmission rate of up to 8Gbps, and can drive a maximum of 5.2 million pixels of LED screen for display.**

➢ **MVB8S internal Linux system and the use of MST91A4Q1 chip as the CPU for the processing of input signals, support for the operation of the device**

information statistics, audio and video processing services, and automatic execution of timed commands, equipment, LCD screen display content control.

- MVB8S adopts self-developed data transmission and synchronization processing technology applied to splicing display system, which significantly improves the display effect. Meanwhile, it adopts all-digital path and uncompressed processing of pure digital signals, which supports the functions of cropping, scaling, splicing, brightness adjustment, color temperature adjustment, screen adjustment, and low-brightness and high-grayness, and it can provide high-performance audio resolution and video image processing services for the terminal computers.
- The computer and control equipment can not only monitor the operation status of MVB8S, video signal resolution, brightness value of the screen, color temperature, receiver card temperature, receiver card type information through the network; it can also transmit environmental information such as temperature, humidity, brightness and smoke monitored by sensors to realize the functions of environmental warning and signal connection monitoring, etc.; it can obtain the processed video streaming data inside the equipment, and display the video processing of the equipment on the computer's desktop to display the image content of the video processing performed by the device.

Application Scenarios

It is suitable for many application scenarios such as small and medium-sized LED displays in shopping malls, hotels, exhibitions, TV studios, etc.

2 Function Introduction

- The loading capacity could reach up to 5.2 million pixels. The output resolution could be customized and the maximum 8192 pixels from the width, 3840 pixels from the height.
- 4 Windows are able to be displayed simultaneous, output resolution width greater than 4096, only a single screen display
- Freely Switching between the Audio and Video/ Adjusting the Volume
- supports 100 Gigabit Ethernet and USB and serial port debugging control
- Input Ports: : DVI*1,HDMI*2, DP*1, VGA*1, Audio*1
- To save the template and use it.
- Seamlessly switching between multiple windows, seamless single layer switching.
- Timing to Switch the Signal Source
- Turn the screen to black with just one button
- Built in with online debugging function Press to lock or unlock the device
- Plugging in the USB Flash to upgrade the firmware of the device
- Built-in test graphics card
- Time Task Sheet

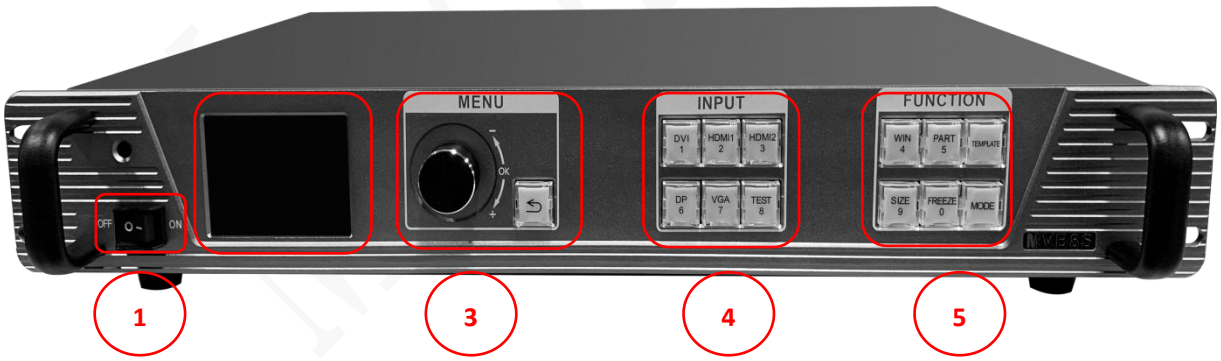
3 Product Parameters

Basic Parameters

Loading Capacity	Single Ethernet Port	650 thousand pixels
	The entire unit	5.2 million pixels
The widest pixel	The entire unit	8192
The highest pixel	The entire unit	3840

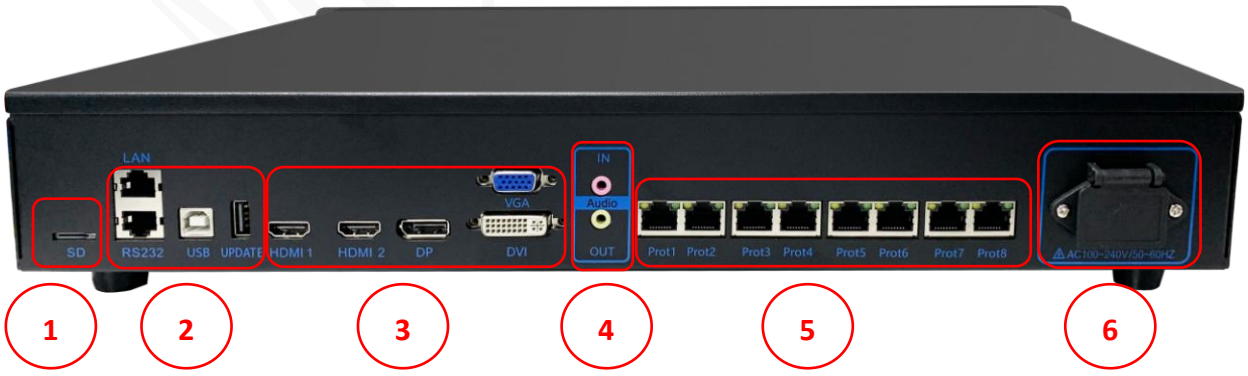
Hardware Introduction

Front Panel



Front Panel Illustration			
#	Button	Illustration	
1	ON/OFF	Power On/Off	
2	LCD	It shows the operation Menu	
3	Rotating Knob	Rotate the knob to choose the menu and ESC	
4	Input Source Switching Keys	DVI	DVI input/#1
		HDMI1	HDMI1 Input/#2
		HDMI2	HDMI2 Input /#3
		DP	DP Input/#6
		VGA	VGA Input/#7
		TEST	Test/#8
5	Functional Keys	Win	Image Layer Choosing/#4
		Part	Full & Partial Screen/ #5
		TEMPLATE	Multiple Windows Templates Shortcut Key
		SIZE	Adjust the size of the image/ #9
		FREEZE	Freeze/black the screen / #0
		MODE	Loading the templates shortcut key

Backside Panel



Input Ports			
#	Port Type	QTY	Illustration
3	DVI	1	1920x1080/60HZ、3840*540/60HZ and EDID Management
	HDMI1	1	1920x1080/60HZ、3840*1080/60HZ and EDID management
	HDMI2	1	1920x1080/60HZ、3840*2160/60HZ and EDID management
	DP	1	1920x1080/60HZ、3840*2160/60HZ and EDID management
	VGA	1	1920x1080/60HZ and EDID management
Output Ports			
#	Port Type	QTY	Illustration
5	Gigabyte Ethernet Port	8	Port Type： RJ45 Transferring Speed：1000BaseTX Supported Receiver Card：Mooncell All Series Receiver Card and Multifunctional Card
Audio Port			
#	Port Type	QTY	Illustration
4	AUDIO IN	1	3.5mm Audio Input
	AUDIO OUT	1	3.5mm Audio Output
Control Interface			
#	Port Type	QTY	Illustration
2	UPDATE	1	USB Upgrading Port
	USB	1	Sending CARD Debugging Port， to get it connected so as to use the AutoLED software
	LAN1	1	100M megabyte communication port（reserved port）
	RS232	1	Serial Port
Function Extension Port			
#	Port Type	QTY	Illustration
1	SD Card	1	Save the configuration files of the screen
Power Port			
#	Port Type	QTY	Illustration
6	Power Port	1	AC Power Input Port :100V~240V

Dimensions:

4 Product Specifications

Specifications

Electric Parameters	Input Voltage	AC-100-240V-50/60HZ
	Rated Power	25W
Operating Environment	Operating Temperature	0℃ - 45℃
	Operating Humidity	10%RH-80%RH No Solidification
Dimensions	483.5 x 300.3 x 66.7 mm(Length x Width x Height)	
Net Weight	3.75KG	
Packaging Info	Peripherals	1×Certificate、1×DP Cable、1×HDMI Cable、1×DVI Cable、1×USB2.0 Cable、1×Power Cord
	Carton	515×130×380mm

Precautions

1. **High voltage danger: The working voltage of this product is AC -100V ~ 240V.**
2. **It is forbidden to immerse conductive objects such as liquids and metal fragments into the equipment to avoid safety accidents.**
3. **Please use the equipment in a dry and clean environment.**