MVB20E 2 In 1 Video Processor

Specification V3.1

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1 Product Overview

Product Introduction

MVB20E is a professional 2in1 led display processor that integrates 4K sending controller and 4K processor that processes multiple images. It's quite handy to be operated but with rich performances, with the use of this processor, it could use less other sending devices instead. It features multiple inputs: UHD and HD; it could display up to 5 windows at the same time, and processes 5 different input sources at the same time; it has 20 LED Outs (Ethernet Ports) and handles 13 Million pixels in total.With advanced interlaced image adaptive processing technology and ultra-clear noise reduction engine, eliminating video image motion smearing and jagged phenomenon,the video image enhancement technology makes the image clearer and more detailed, rich in details, and full of colors ,Image quality is stable.

Application Scenarios

It is suitable for many application scenarios such as: large stage theatre performance, exhibitions, bars and clubs or any where that the large led screen or the use of mixed led screen is required.

2 Function Introduction

- **Multiple Inputs：1×HDMI 2.0、1×DP1.2、2×DVI、2×HDMI1.3.**∗∗

- **EDID Management: Custom the resolutions of DVI、HDMI and DP.**

- **It has 20 LED OUTS(Ethernet Ports)，and handles 13 Million Pixels.**

- **Custom Output Resolution;Widest Pixels:15360 ，Highest Resolution:15360.**

- **Picture in Picture：Insert the picture(window) to a 4K main picture(window).**

- **Multiple Image Layers：Up to 5 layers can be superimposed and switched arbitrarily.**

- **Screen image transparency function: Each group of window supports independent transparency settings** ∗∗

- **It supports audio input and output and to freely switch between the audio and video.**

- **It has 10 preset scene templates, and they could be directly called.**

- **It has the built-in clock, support timing scene template switching.**

- **It supports to be connected to an external brightness sensor, with that to automatically adjust the brightness of LED screen according to the change of the environment.**

- **It supports the 3D mode, active 3D mode, electronic shutter 3D**

mode, and the continuous frame mode.

● **It supports to lock the machine by pressing the button on it's front panel.**

● **It supports to get your configuration files back by clicking just a button on the machine; and supports to insert the SD Card for backup and restore.**

● **It supports to froze the image or turn it into a black state by clicking on just one button.**
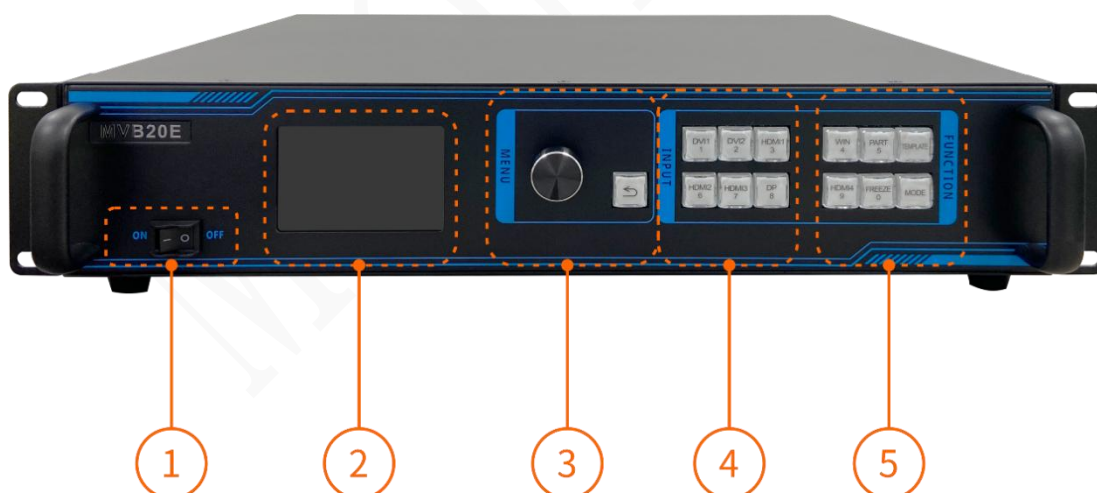
3 Product Parameters

Basic Parameters

Loading Capacity	1 Network Port	650 thousand pixels
	1 unit (entire unit)	13 million pixels
Widest Pixels	1 Unit	15360 Pixels
Highest	1 Unit	15360 Pixels

Note: After the load height exceeds 8192 points, the higher the height, the lower the load of the whole machine, and the minimum is not less than 11.98 million points.

Front Panel

Front Panel Illustration		
#	Name	Illustration

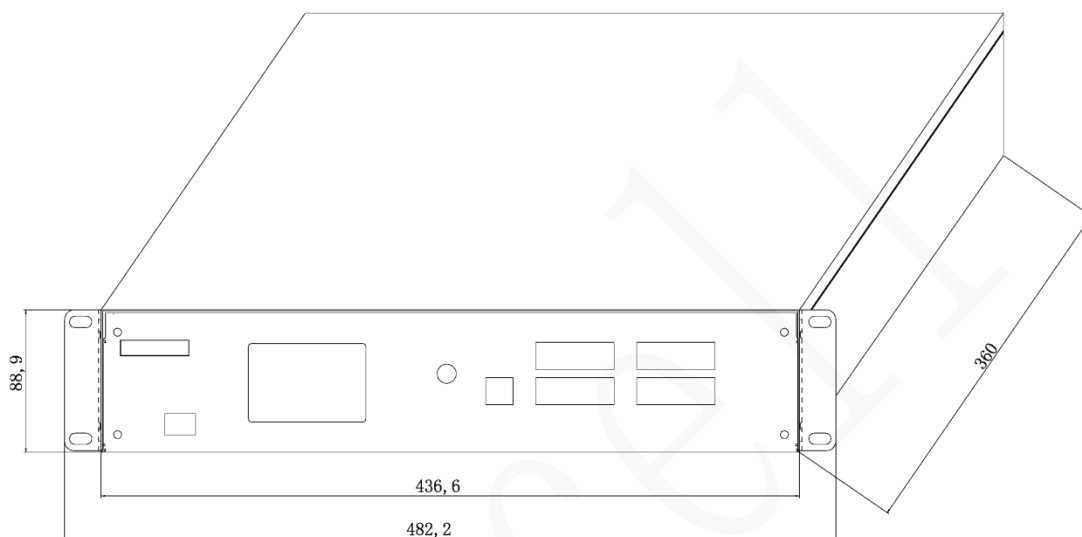| 1	Power Button	On/Off	
2	LCD	It displays the operation menu.	
3	Menu Button	Spin the button, turn aside to select a certain menu. And there's this ESCAPE button to goes back to one menu screen.	
4	Signal Inputs	DVI1	DVI1/#1
		DVI2	DVI2/#2
		HDMI1	HDMI1/#3
		HDMI2	HDMI2/#6
		HDMI3	HDMI3/#7
		HDMI4	Resize the screen shortcut/number key 9 (built-in playback board signal source)
		DP	DP/#8
5	Function Button	Win	Select a certain window/#4
		Part	Full or Partial screen /#5
		TEMPLATE	Templates
		FREEZE	Turn the screen to black/#0
		MODE	Load the scene

Backside Panel

Input Interface		
Interface	QTY	Illustration
HDMI2.0 (HDMI3)	1	Choose one of the two signals, and only one signal can be input at the same time. Maximum support 3840×2160@60Hz/7680×1080@60Hz video source input. It supports to custom the resolution.
DP1.2	1	
HDMI1.3 (HDMI1 、 HDMI2)	2	It supports maximum 2304×1152@60Hz video source input. It supports to custom the resolution. Widest Pixels：3840（3840×640@60Hz）
DVI （DVI1、DVI2）	2	It supports maximum 2304×1152@60Hz video source input. It supports to custom the resolution. Widest Pixels：3840（3840×640@60Hz）
Output Interface		
Interface	QTY	Illustration
LED OUTS(Ethernet Ports)	20	The maximum loading capacity could reach up to 10.2 million pixels, both the widest and highest pixels could reach up to 15360, and it can be freely spliced(Up, Down, Left, Right).
Audio Interface		
Interface	QTY	Illustration
AUDIO IN	1	it could be connected to an external audio source.
AUDIO OUT	1	The Audio is able to be output from any signal window or external audio source.
Control Interface		
Interface	QTY	Illustration

LAN	1	100 Megabyte Network Port, to control the device via the
RS232	1	Serial Port, to communicate with the central controller
USB	1	1×USB 2.0（Type-B，square type）：Host computer control
Backup and Restore		
SD Card	1	The configuration can be backup to the SD Card, and then to restore it from the SD Card if it's needed.
Function Extension		
3D	1	To be connected to the 3D transmitter,(Reserved,need to
SENSOR	1	To be connected to a light sensor to automatically adjust the brightness.
Power Interface		
Interface	QTY	Illustration
Power Port	1	AC-100-240V-50/60HZ AC power port.

Dimensions

MVB20E

4 Product Specifications

Specifications

Electric Parameters	Input Voltage	AC-100-240V-50/60HZ
	Rated Power	36W
Operating Environment	Operating Temperature	-20℃ - 70℃
	Operating Humidity	10%RH-80%RH No Solidification
Dimensions	482.2*360*88.9mm(Length x Width x Height)	
Net Weight	5.05KG	
Packaging	1 x MVB20E. Peripherals: 1x USB2.0 Cable, 1x DVI Cable, 1x DP Cable. 1x HDMI, 1x Power Cable, 1x Certificate.	

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.**