



MVB4S Pro

2IN1 Video Processor

Specification V4.0



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1 Update Records

Document Version	Hardware Version	Release Time	Update Record
V4.0	MVB4S Pro (V2.0)	July 25(th), 2025	First release

2 Product Introduction

MVB4S Pro is an easy-to-operate and feature-rich device that specially developed for LED displays. The maximum load of a single device 2.60 million pixels, the regular version supports a maximum width of 3840 pixels, and a maximum height of 1920 pixels; It supports high-definition multi-type interface input, integrates professional display control technology and powerful video processing capabilities, and it simplifies the scene environment to build a video processor. Using high-performance image processing chip; 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.

3 Product Characteristics

3.1 Improve the display effect

- Multiple input interfaces
 - 2 × HDMI1.3 video signal input (HDMI2 Built-in)
 - 1×DVI、 1×DVI-LOOP
 - 1×VGA

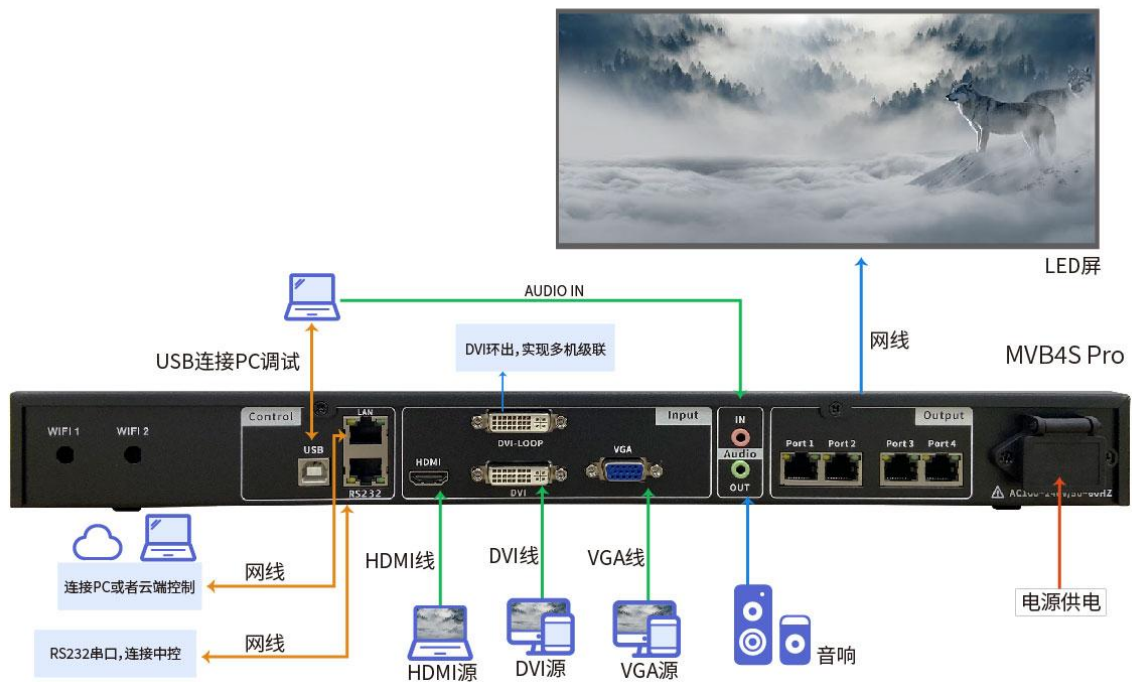
- EDID, Support custom EDID management
- Output interface
 - 4 gigabit network ports
 - Maximum load 2.60 million pixels, custom output resolution, regular version maximum width 3840, maximum height 1920, FPGA scaled version supports maximum width/height 7680.
- Audio interface: Support audio input and output

3.2 Diversified Display Function

- It supports seamless switching or fade-in and fade-out between multiple signal input channels to enhance and present professional-quality presentation pictures.
- It supports the quick screen connection, with very simple operation, the screen configuration could be completed.
- Support setting output canvas
- Support graphic overlay and matting synthesis functions, which is convenient to realize subtitle overlay and image synthesis effects
- Supports pixel-by-pixel scaling of input images according to display resolution
- Support timing signal switching, timing brightness adjustment
- Support multi-machine cascade splicing
- Support custom EDID
- Support equipment voltage and temperature self-detection
- Support time lock, support cloud platform management
- Support dual-screen display (HDMI and DVI can display dual-screen display at the same time), which can realize picture-in-picture or picture-out-picture, and the size can be adjusted

4 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.



5 Product Appearance

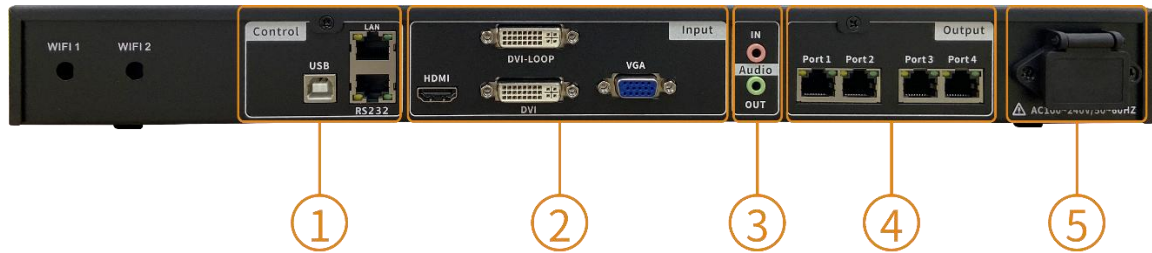


*Product images are for reference only. The actual product shall prevail upon purchase.

5.1 Data Interface Illustration

#	Keys	Illustrations
1	ON/OFF	Power ON/OFF
2	LCD Display	To display the current status of the device and to have the menu settings. LCD Resolution: 160×128
3	Knob	1 、 In the main interface,press the knob to enter the menu operation interface; 2、In the menu operation interface,rotate the knob to choose the menu, press the knob to select the current menu or enter its sub-menu. 3 、 Once the menu that is with parameters selected, you could rotate the knob to adjust the parameters, and make sure to double press the knob to confirm.
4	Esc	Return(ESC)/Cancel the current menu or operation.
5	Function	Function keys: GUIDE/1: Set Output Canvas PIP/2: Switch between the main window and the secondary window, click to display the secondary window, and press again to close the secondary window. LED/3: Screen inspection SCALE/6: Window settings shortcut key (zoom) MODE/7: Scene loading shortcut key BLACK/8
6	Input Signal Source Key	HDMI1、HDMI2、DVI、VGA、 Input source key description: Blue blinking: The source is selected, but there is no signal

Rear Panel

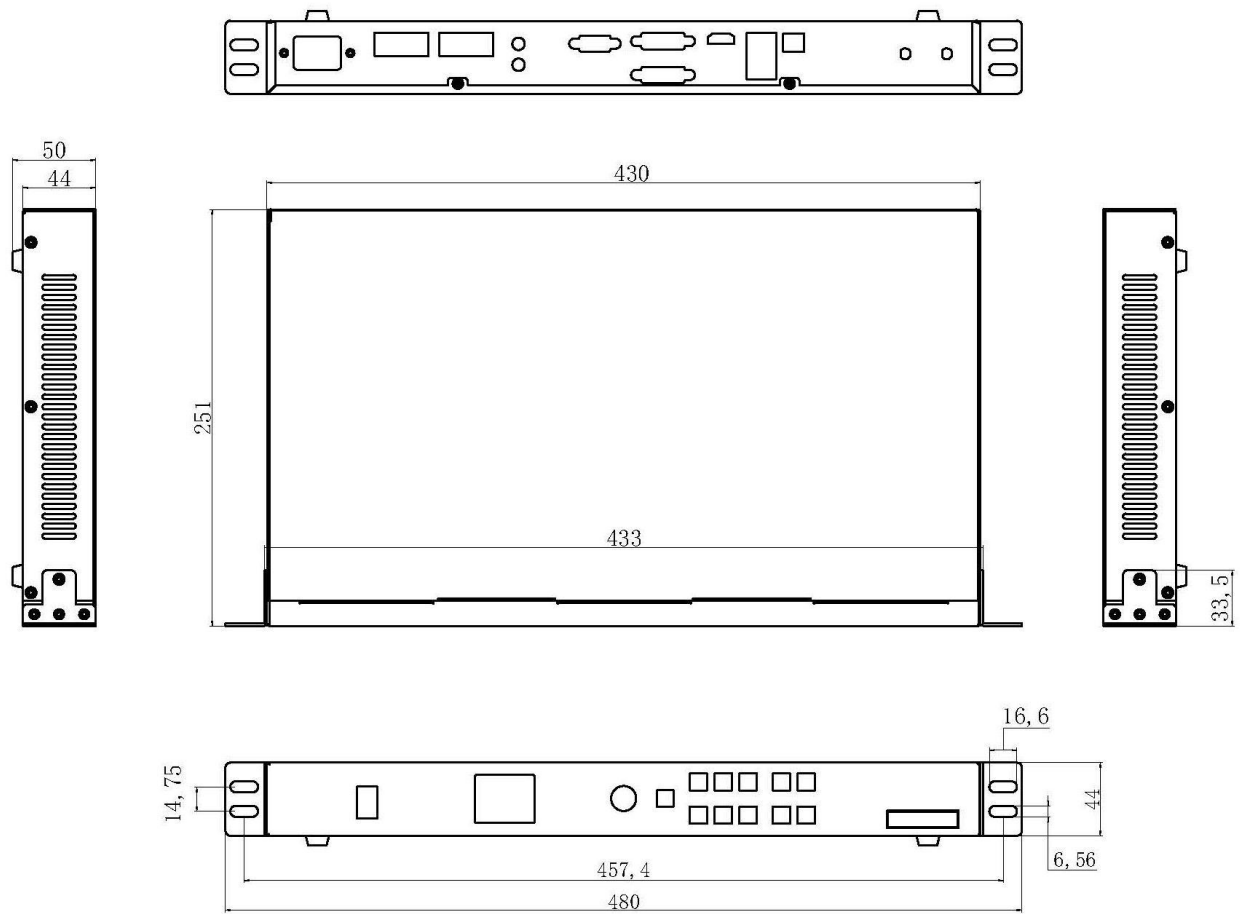


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Input Interface			
#	Interface Type	QTY	Illustration
2	HDMI	2	2*HDMI1.3 Standards , maximum supports 1920×1080@60Hz resolution. Video Source Input , Downwards Compatible.it supports HDCP1.4. Support custom resolution: Custom maximum width: 2048 (2048 x 1080@60Hz) Custom maximum height: 2048 (1080 x 2048@60Hz)
	DVI	1	VESA Standards.Maximum supports 1920×1200@60Hz resolution video source input , downwards compatible. Support custom resolution Custom maximum width: 3840 (3840 x 640@60Hz) Custom maximum height: 3840 (640 x 3840@60Hz) Interlaced signal input is not supported
	VGA	1	1 x VGA standard, analog RGB: Maximum support 3840 × 640@60Hz resolution video source input, backward compatible. It supports HDCP1.4. Support custom resolution: Custom maximum width: 3840 (3840 x 640@60Hz) Custom maximum height: 3840 (640 x 3840@60Hz)

AUDIO Interface			
#	Interface	QTY	Illustration
3	Audio in	1	3.5mmAudio Interface Input
	Audio Out	1	3.5mmAudio Interface Output
Control Interface			
#	Interface Type	QTY	Illustration
1	LAN	1	100M Ethernet Port, Reserved Port
	RS232	1	Serial Port
	USB-B	1	Configure Port to connect to the PC
Output Interface			
#	Interface Type	QTY	Illustration
4	Network Port	4	4 Gigabit Ethernet port output connectors to the receiver card. Network port indicator light description: - Dual lights are always on: the power is turned on, but the receiving card is not detected. - Dual lights are not on: the power supply is not connected. - The yellow light is always on, the green light is flashing: the signal is normal and communication is in progress.
5	Power Supply	1	AC-100-240V-50/60HZ AC power interface

5.2 Dimensions



Tolerance: ± 0.3 Unit: mm

6 Product Specification

6.1 Basic Parameters

Loading capacity	Single network port	The maximum load is 655360 pixels, and the network port load is 1280×512 .
	Whole Unit	2.60 million Pixels
Output Resolution	Pixels are controlled within 2.60 million points Widest: 3840 Highest: 1920	
Input Resolution	Maximum support 3840x640@60Hz resolution video source input, backward compatible	

6.2 Specification

Electrical parameters	Input voltage	AC-100-240V-50/60HZ
	Rated current	20W
Working environment	Working temperature	0°C~50°C
	Working humidity	5%RH~85%RH has no condensation.
Storage environment	Temperature	-10°C~60°C
Board size	480mm×251×44mm	
Net weight	2.8 kg	
Outer packing size	515×135×355mm	
Gross weight of product	3.82 Kg Description: Including wire, accessories	
Packing mode	3 PCS /box	
Accessory	1 × power cord, 1 × USB2.0 cable, 1 × HDMI cable, 1*DVI Cable, 1 × certificate	

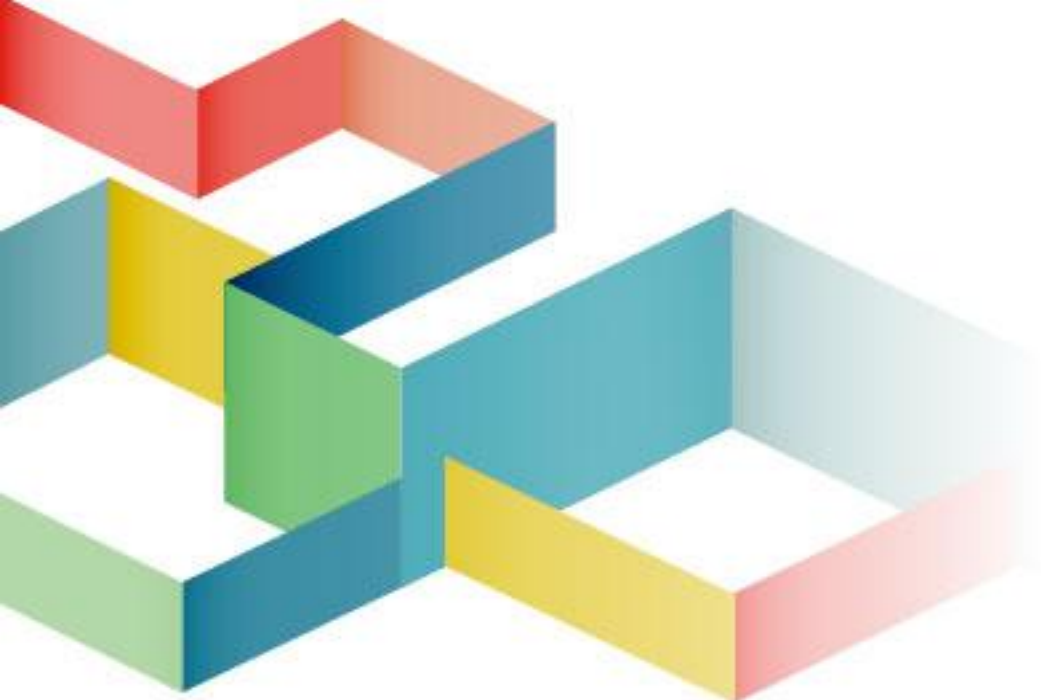
*Current and power consumption may vary depending on factors such as product usage, environment, and settings.

6.3 Video source Characteristics

Input Interface	Color Depth		Maximum input resolution
HDMI1.3	8bit	RGB4:4:4	1920×1080@60Hz
		YCbCr4:4:4	
		YCbCr4:2:2	
DVI	8bit	RGB4:4:4	1920×1200@60Hz

7 Precautions

- High voltage hazard: This product operates at AC 100V~240V.
- Do not allow liquids or metal fragments and other conductive materials to enter the device, to prevent safety accidents.
- Please use the device in a dry and clean environment.



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