



# **MVB4S** 2IN1 Video Processor

**Specification V3.8**

**Shenzhen Mooncell Electronics Co., Ltd**

# **1 Product Overview**

## **Product Introduction**

MVB4S is an easy-to-operate and feature-rich device that specially developed for LED displays. It supports high-definition multiple-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.

## **Product Features:**

- It has 4 channels of gigabit network port output to directly connect to the receiving card, simplifying the on-site environment construction.
- It is not necessary to debug the display screen through a computer, and the display screen can be simply debugged using MVB4S.
- The USB ports on the front and rear panels support USB playback, plug and play.

- The input channel can be switched seamlessly

## 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**

- It supports USB play, the video and picture could be played together.
- It supports 3 zoom modes: Full Screen Zoom, Pixel-to-Pixel Display and Custom Zoom.
- 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.
- The intuitive LCD display interface on the front panel and clear button light prompts simplify the control operation of the system.
- It support to create 8 user scenes as templates, save them and call them directly, which is convenient to use.
- It supports 4 Ethernet Port Outputs, the maximum loading capacity could reach up to 2.5 million pixels.
- It supports to adjust the positions and sizes of the window and also the window capture function is supported.
- It supports external independent audio input and output.
- The output resolution could be user defined( custom the resolution)
- The Input EDID could be user defined (customized)

- It supports the synchronous switching of the video and audio.
- It supports the switching of the partial or Full Screen.

# 3 Product Parameters

## Basic Parameters

Loading	1 Network Port	650 thousand pixels
Capacity	1 unit ( entire unit)	2.5 million pixels
Output Resolution	1、 The pixels should be controlled within 2.5 million. 2、 when the number of the horizontal pixels exceeds 1920,then the number of the vertical pixels must be within 1080. 3、 When the number of vertical pixels exceeds 1080, then	
Input Resolution	Supports up to 1920x1080@60Hz resolution video source input, backward compatible	

## Video Source Format

Input Interfaces	Color Depth		Max Resolution
HDMI1.3	8bit	RGB4:4:4	1920×1080@60HZ
		YCbCr4:4:4	
		YCbCr4:2:2	
DVI	8bit	RGB4:4:4	1920×1080@60HZ

## Hardware Introduction

### Front Panel



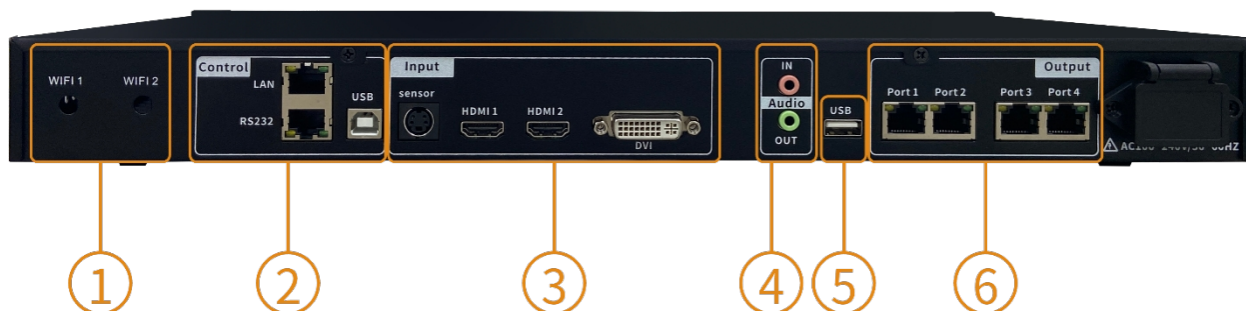
Front Panel Illustration		
#	Buttons	Illustration
1	Power ON/OFF	Device Power ON/OFF
2	LCD	It displays the operation menu.
3	Operation Button(Rotate Knob)	Rotate to choose the menu operation ESC Key.
5	esc	ESC/Cancel the current menu or operation
4	SCALE	Short Key for Full Screen Scale
	Input source HDMI1, HDMI2, DVI, USB, INC, BLACK	<p>Input source button description: □</p> <p>-HDMI1: HDMI1 input source button, multiplexed to “▶▶” during USB flash drive playback, to pause or play the file. □</p> <p>-HDMI2: HDMI2 input source button, multiplexed as “◀◀” during USB flash disk playback, ▶▶ selects the previous file of the current file to be played. □</p> <p>-DVI: DVI input source button, ■ multiplexed as “ ” in USB flash disk playback, selects the next file to play the current file.</p>

		<p>-USB: External media playback, USB flash disk playback input source, multiplexed to “ ” during USB flash disk playback, stop playback. □</p>
6	INC	<p>1, short press the key, INC indicator light fast flash, the sending card has been patrolling the receiving card offset; INC indicator light fast flash, press the key, INC indicator light extinguished immediately release the key, INC indicator light no longer fast flash, the patrol function is closed.</p> <p>2, long press the key more than 3S and then release, INC indicator slow flash, the transmitter card to start inspection, inspection of the contents of the host computer configuration down all the inspection content (receiver card port offset, receiver card parameters, transmitter card parameters). The inspection ends, and the INC indicator goes out.</p> <p>3、 Press and hold the button for more than 10s and then release it, the INC indicator light will be always on, and the contents of the inspection will be cured (receiver card offset, receiver card parameter, receiver card gamma, transmitter card parameter), do not carry out any other operation in the process of curing. When curing is finished, the INC indicator goes out.</p> <p>4、 The above operation is executed without connecting AutoLED.</p> <p>5、 The above functions need the master control to take effect after the complex tuning screen curing data and then save the inspection parameters.</p> <p>-BLACK: Black screen shortcut key</p>





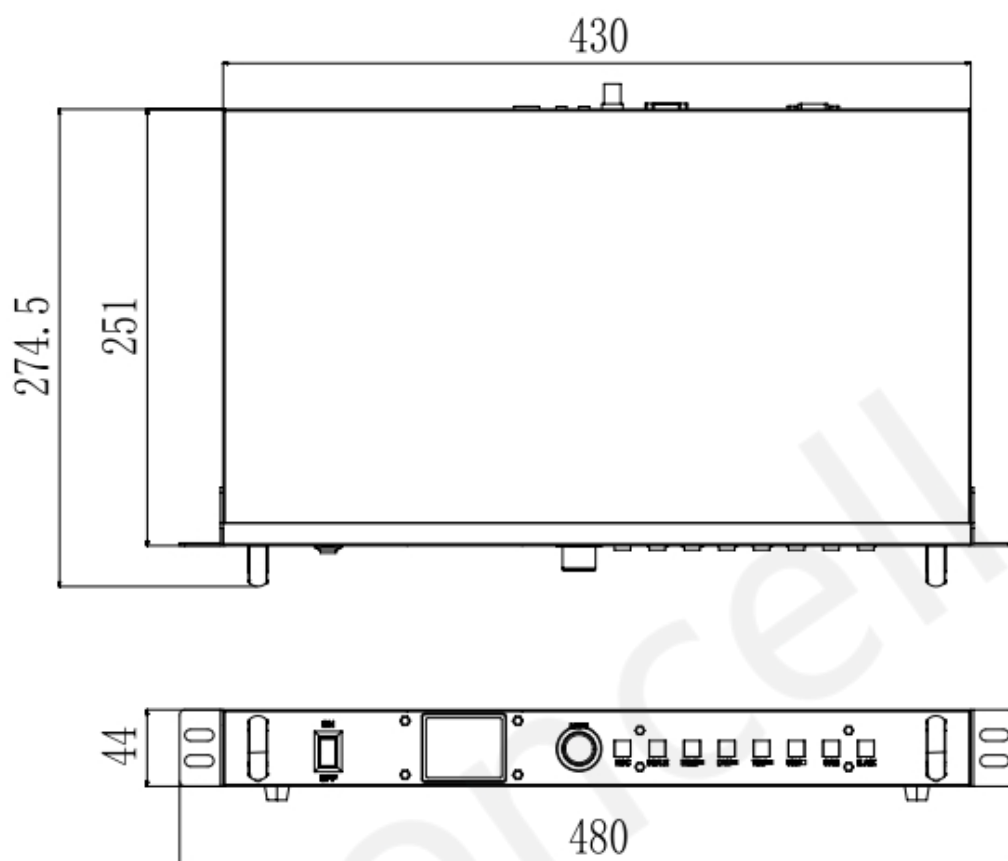
## Backside Panel



Input Interface			
#	Interface Type	QTY	Illustration
3	HDMI	2	HDMI1.3 Standards ,maximum supports 1920×1080@60Hz resolution. Video Source Input , Downwards Compatible.it supports HDCP1.4.
	DVI	1	VESA Standards.Maximum supports 1920×1080@60Hz resolution video source input , downwards compatible.
	Sensor	1	Sensor Interface
5	USB	1	<p>1×USB 2.0 Port, to connect to the U Disk, it supports 1080p@30fps Video File.</p> <p>U Disk File Format Supported:NTFS 、 FAT32 and FAT16, exFAT (FAT64) is not supported.</p> <p>Image Format: jpg、jpeg、 png and bmp。</p> <p>Video Code : MPEG1/2 , MPEG4 , Sorenson H.263 , H.263, H.264(AVC1), H.265(HEVC), RV30/40, Divx, Xvid</p> <p>Video bit rate: 4000 or less.</p> <p>Audio Coding: MPEG1/2 Layer I , MPEG1/2 LayerII , MPEG1/2 Layer III, AAC-LC, VORBIS,</p>

			PCM and FLAC
AUDIO Interface			
#	Interface	QTY	Illustration
4	Audio in	1	3.5mmAudio Interface Input
	Audio Out	1	3.5mmAudio Interface Output
Control Interface			
#	Interface Type	QTY	Illustration
2	LAN	1	100M Ethernet Port, Reserved Port
	RS232	1	Serial Port, Reserved Port
	USB	1	Configure Port to connect to the PC
1	WIFI antenna	2	Wireless Router WIFI Antenna (Customized)
Output Interface			
#	Interface Type	QTY	Illustration
6	Network Port	4	4 Gigabit Ethernet port output connectors to the receiver card.

## Dimensions:



# 4 Product Specifications

## Specifications

Electric Parameters	Input Voltage	AC-100-240V-50/60HZ
	Rated Power	11W
Operating Environment	Operating Temperature	-0°C - 45°C
	Operating Humidity	10%RH-90%RH No Solidification
Dimensions	480 x 250.8 x 44 mm( Length x Width x Height)	
Net Weight	2.61 KG	
Contour Dimension of Pac	515×130×355mm	
Gross weight (including packaging)	3.8 KG	

## 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.**