Mooncell

Shenzhen Mooncell Electronics Co., Ltd

2IN1 Led Video Processor Series

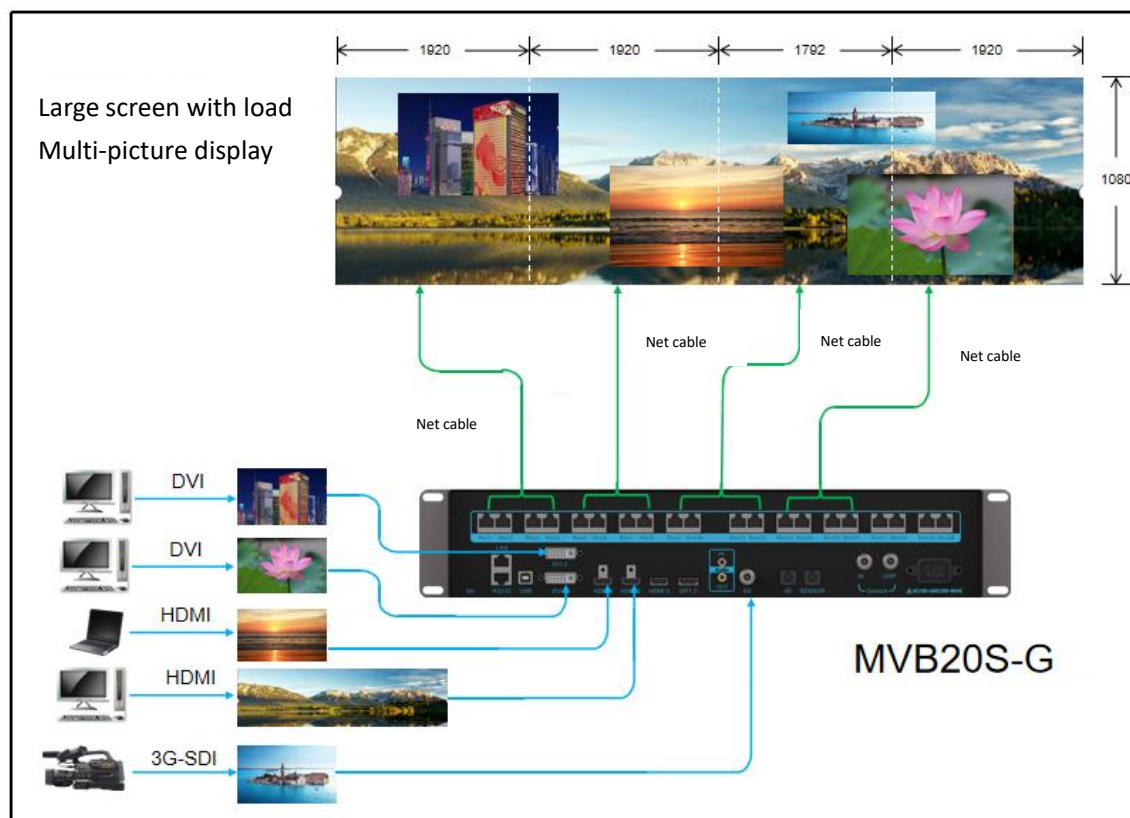# MVB20S-G Product Specifications

1 Product Overview

Product Introduction

MVB20S-G is a professional 2in1 UHD XR Shooting 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 1 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.

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2 Function Introduction

- *Multiple Inputs：1×HDMI 2.0、1×DP1.2、2×DVI、2×HDMI1.3、1×3G-SDI*
- *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:16384，Highest Resolution:15360.*
- *Supports HDR10\HLG processing, 10bit/8bit video source inputs.*
- *Low latency processing, video source signal output no more than 1ms when used as a master control.*
- *Supports Genlock control, shutter adaptation and frame rate adaption.*
- *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.*
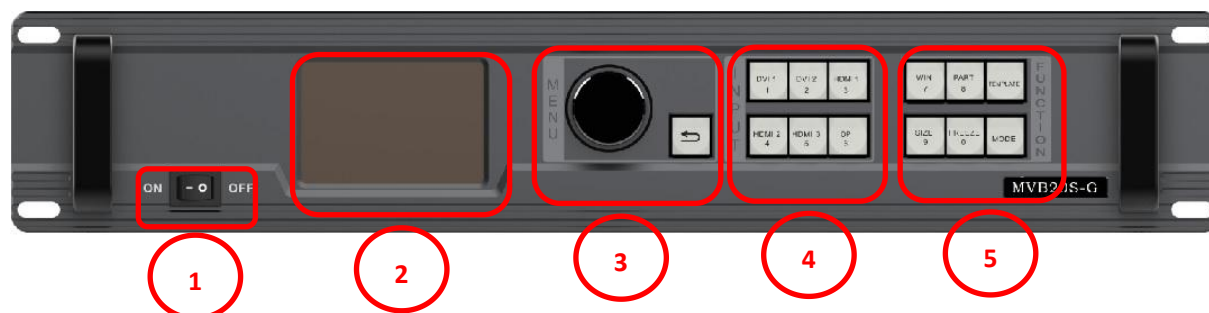
3Product Parameters

Basic Parameters

Loading Capacity	1 Network Port	650 thousand pixels
	1 unit (entire unit)	13 million pixels
Widest Pixels	1 Unit	16384 Pixels
Highest Pixels	1 Unit	15360 Pixels

Note:After the load height exceeds 8192 points, the higher the height, the load of the whole machine gradually decreases, the minimum is not less than 11,980,000 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*
		DP — *DP/#8*
5	*Function Button*	*Win* — *Select a certain window/#4*
		Part — *Full or Partial screen /#5*

		TEMPLATE	Templates
		SIZE	Adjust the size of the window/#9
		FREEZE	Turn the screen to black/#0
		MODE	Load the scene

Rear 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.*
DP1.2	*1*	*It supports to custom the resolution.* *Widest Pixels：7680（7680×1080@60Hz）* *Highest Pixels：7680（1080×7680@60Hz）*
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）* *Highest Pixels：3840（640×3840@60Hz）* *The interlaced signal is not supported to be input.*
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）* *Highest Pixels：3840（640×3840@60Hz）* *The interlaced signal is not supported to be input.*
3G-SDI	*1*	*Maximum it support 1080P@60Hz ， supports SD-SDI、 HD-SDI ,3G-SDI.*
Output Interface		
Interface	**QTY**	**Illustration**

LED OUTS(Ethernet Ports)	*20*	*The maximum loading capacity could reach up to 13 million pixels, the widest pixels could reach up to 16384 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 internet*
RS232	*1*	*Serial Port, to communicate with the central controller*
USB	*1*	*1×USB 2.0（Type-B，square type）：Host computer control Interface*

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 Interface		
3D	*1*	*To be connected to the 3D transmitter,(Reserved,need to be customized)*
SENSOR	*1*	*To be connected to a light sensor to automatically adjust the brightness.*
Genlock	*1*	*Genlock Control Interface, one input, one loop out*

Power Interface

Interface	*QTY*	*Illustration*
Power Port	*1*	*AC-100-240V-50/60HZ AC power port.*

Dimensions
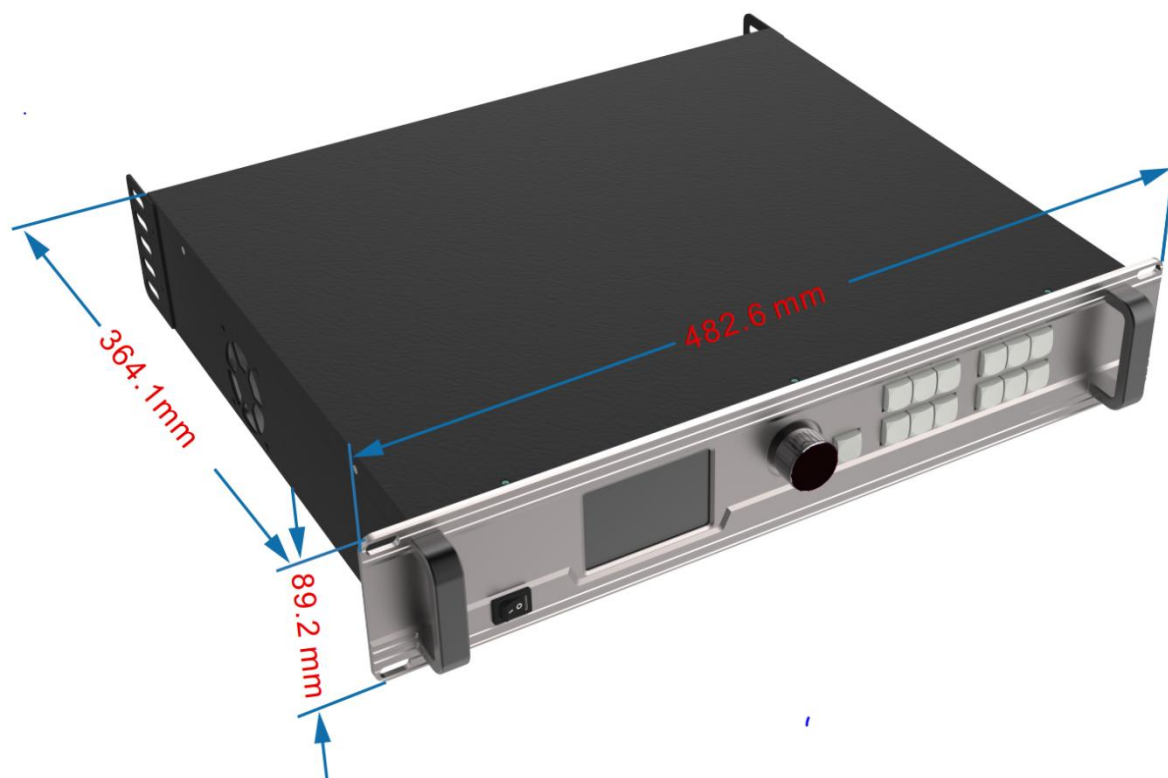
4Product Specifications

Specifications

Electric Parameters	*Input Voltage*	*AC-100-240V-50/60HZ*
	Rated Power	*36W*
Operating Environment	*Operating Temperature*	*-20℃ - 60℃*
	Operating Humidity	*10%RH-80%RH No Solidification*
Dimensions	*482.6*364.1*89.2mm(Length x Width x Height)*	
Net Weight	*5.2KG*	
Accessories	*1 x MVB20S-G. Peripherals: 1x USB2.0 Cable, 1x DVI Cable, 1x DP Cable. 1x HDMI, 1x Power Cable, 1x Certificate.*	
Packaging Dimension	*565×445×185mm*	

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.*