

# PRODUCT SPECIFICATION

All-in-one LED Controller

**HD-VP1220S** 



## 1. System Overview

HD-VP1220S is a 2-in-1 video processor, integrating traditional video processor and 12-channel Gigabit Ethernet port output. It not only simplifies the on-site environment construction, but also improves the reliability of the product. It supports 5- channel synchronous signal input and can be used in various occasions that require synchronous playback, such as hotels, shopping malls, conference rooms, exhibitions, studios, etc. In addition, the device also supports point-to-point input/output, allowing the LED display to display clearer images.

## 2. Connection Diagram





## 3. Product Features

#### Input

- Supports maximum 4096×2160@60Hz synchronized signal input;
- Supports 2-way HDMI, 1-way DP, 1-way DVI, 1-way VGA signal input, multi-channel video signal switching at will;
- Supports 1 TRS 3.5mm standard dual-channel audio input and HDMI/DP audio input.

#### Output

- Supports two-screen layout and maximum 2×4K size window;
- Comes standard with 12-channel Gigabit network port and direct cascade receiver card;
- Maximum control of 7.8 million pixels, horizontal maximum support for 16,000 pixels, vertical maximum support for 4,000 pixels;
- 1 road TRS 3.5mm standard dual-channel audio output.

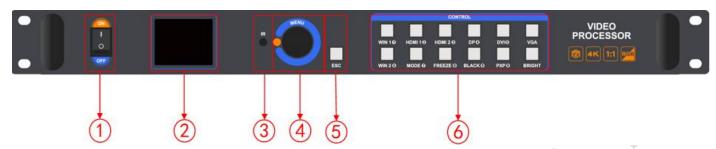
#### **Features**

- Video signal arbitrary switching, cropping, scaling;
- Support 16 scene presets and call;
- Support brightness adjustment, color temperature adjustment and key lock function;
- Supports arbitrary overlapping of network ports and non-rectangular bandwidth;
- Support point-to-point display, limited to fully;
- Support RS232 serial port protocol control, docking center control equipment;
- Support Wi-Fi Station mode, AP mode, Wi-Fi Station+AP mode;
- Supports cell phone APP wireless control;
- Supports infrared remote control (optional);
- Supports Wi-Fi remote call.



# 4. Appearance Description

## Front panel:

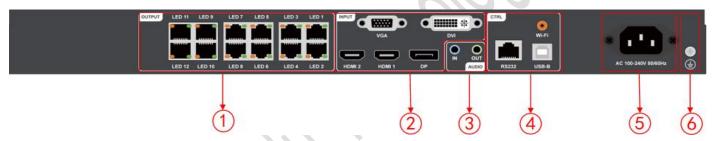


Key Des	cription	C(O, 1)		
No.	Button	Description		
1	Power switch	Controls AC power input		
2	LCD DISPLAY	Debugging display menus, screen parameters and other information		
3	IR	Receive infrared remote control		
4	MENU KNOB	Press the knob to enter a sub-menu or to confirm a selection		
5	ESC	Exit key /Back key		
6	WIN1~WIN2	Selection of opened screen windows Function key: key multiplexing function for digital selection, generally used when setting resolution		
	HDMI 1	Select HDMI 1 signal to play Function key: key multiplexing function for digital selection, generally used when setting resolution		
	HDMI 2 (SDI)	Select HDMI 2 (SDI) signal to play Function key: key multiplexing function for digital selection, generally used when setting resolution		
	DP	Select DP signal playback Function key: key multiplexing function for digital selection, generally used when setting resolution		
	DVI	Select DVI signal playback Function key: key multiplexing function for digital selection, generally used when setting resolution		
	VGA(REV)	Selection of VGA signal playback (reserved function)		



AMODE  Quickly call up the preset mode recall menu Function key: key multiplexing function for digital selection, generally used when setting resolution  One-touch freeze button FREEZE  Function key: key multiplexing function for digital selection, generally used when setting resolution  One Touch Black Screen Button  BLACK  Function key: key multiplexing function for digital selection, generally used when setting resolution  Quick access to the two-screen layout menu  PXP  Function key: key multiplexing function for digital selection, generally used when setting resolution  BRIGHT  Quickly recall the brightness setting button		
used when setting resolution  One-touch freeze button Function key: key multiplexing function for digital selection, generally used when setting resolution  One Touch Black Screen Button  BLACK Function key: key multiplexing function for digital selection, generally used when setting resolution  Quick access to the two-screen layout menu  PXP Function key: key multiplexing function for digital selection, generally used when setting resolution		Quickly call up the preset mode recall menu
One-touch freeze button FREEZE Function key: key multiplexing function for digital selection, generally used when setting resolution One Touch Black Screen Button Function key: key multiplexing function for digital selection, generally used when setting resolution Quick access to the two-screen layout menu Function key: key multiplexing function for digital selection, generally used when setting resolution	MODE	Function key: key multiplexing function for digital selection, generally
FREEZE  Function key: key multiplexing function for digital selection, generally used when setting resolution  One Touch Black Screen Button  Function key: key multiplexing function for digital selection, generally used when setting resolution  Quick access to the two-screen layout menu  PXP  Function key: key multiplexing function for digital selection, generally used when setting resolution		used when setting resolution
used when setting resolution  One Touch Black Screen Button  Function key: key multiplexing function for digital selection, generally used when setting resolution  Quick access to the two-screen layout menu  PXP  Function key: key multiplexing function for digital selection, generally used when setting resolution		One-touch freeze button
One Touch Black Screen Button  Function key: key multiplexing function for digital selection, generally used when setting resolution  Quick access to the two-screen layout menu  PXP  Function key: key multiplexing function for digital selection, generally used when setting resolution	FREEZE	Function key: key multiplexing function for digital selection, generally
BLACK  Function key: key multiplexing function for digital selection, generally used when setting resolution  Quick access to the two-screen layout menu  Function key: key multiplexing function for digital selection, generally used when setting resolution		used when setting resolution
used when setting resolution  Quick access to the two-screen layout menu  PXP  Function key: key multiplexing function for digital selection, generally used when setting resolution		One Touch Black Screen Button
Quick access to the two-screen layout menu  PXP Function key: key multiplexing function for digital selection, generally used when setting resolution	BLACK	Function key: key multiplexing function for digital selection, generally
PXP Function key: key multiplexing function for digital selection, generally used when setting resolution		used when setting resolution
used when setting resolution		Quick access to the two-screen layout menu
	PXP	Function key: key multiplexing function for digital selection, generally
BRIGHT Quickly recall the brightness setting button		used when setting resolution
	BRIGHT	Quickly recall the brightness setting button

## Rear panel:



Input Interface					
No.	Interface name	Quantity	Description		
			DP input interface		
	. 011	1	Interface type: DP		
	W/V/		Signal standard: DP 1.2 Backward Compatibility		
	DP1.2		Resolution: VESA standard, ≥720×480@60Hz,		
			≤4096×2160@60Hz		
( 0			Support color space: RGB4:4:4/YCbCr4:4:4		
			Support color depth: 8bit/10bit		
2			Support limit width: 4096 Limit height: 4096		
<b>)</b>			Supports accompanying audio		
	HDMI1~2	2	HDMI 2.0 input interface × 1 (HDMI 1)		
			Interface type: HDMI-A		
			Signal standard: HDMI 2.0 backward compatible		
			Resolution: VESA standard, ≥800×600@60Hz,		
			≤4096×2160@60Hz		
			HDMI 1.4 Input interface × 1 (HDMI 2)		



			Interface type: HDMI-A
			Signal standard: HDMI 1.4 backward compatible
			Resolution: VESA standard, ≥800×600@60Hz, ≤4096 ×
			2160@30Hz
			Support color space: RGB4:4:4/YCbCr4:4:4
			Support color depth: 8bit/10bit
			Support limit width: 4096 Limit height: 4096
			Supports accompanying audio
			DVI input port
			Interface type: DVI-I socket
	DVI	1	Signal standard: DVI 1.0, HDMI 1.3 Backward Compatibility
			Resolution: VESA standard, ≥800×600@60Hz,
			≤1920×1200@60Hz
			Supported maximum width: 2048 Maximum height: 2048
		1	VGA input
			Interface type: DB15 socket
			Signal standard: R, G, B, Hsync, Vsync: 0 to1Vpp±3dB (0.7V
	VGA		Video+0.3v Sync)
	VGA		75 ohm black level: 300mV Sync-tip: 0V
			Resolution: VESA standard, ≥720×480@60Hz,
			≤1920×1080@60Hz
3	AUDIO IN	1	TRS 3.5mm dual channel audio input interface
5	Dower Supply	1	AC 100 ~ 240V 50/60Hz
ຽ	Power Supply	1,6	AC 100 ~ 240 V 50/00 HZ

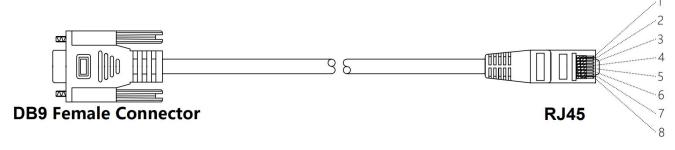
Output Interface					
No.	Interface name	Quantity	Description		
1	Gigabit Ethernet	16	Used for cascading receiving cards, transmitting RGB data stream, each network port controls 650,000 pixels, supports docking multi-function cards		
3	AUDIO OUT	1	TRS 3.5mm dual channel audio output interface Connect to an audio amplifier for high-power external speakers		
6	Grounding interface	1	Anti-static/leakage protection, personal safety and equipment normal operation		

Control interface			
No.	Interface name	Quantity	Description

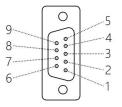


	RS232	1	RJ45 interface, connected to the central control device
4	USB-B	1	Connect to computer for debugging equipment
	Wi-Fi antenna interface	1	Connect a Wi-Fi antenna to enhance Wi-Fi signal

<sup>\*</sup> The RJ 45 to DB9 cable diagram is as follows. It is optional. If you need it, please contact Huidu sales or technical support in advance.



## **Line Ordering:**



DB9 female cor	nnector F	J45 connector
2-RX		TX-1(Red)
3-TX		RX-2(Blue)
5-GND		GND-3(Black)

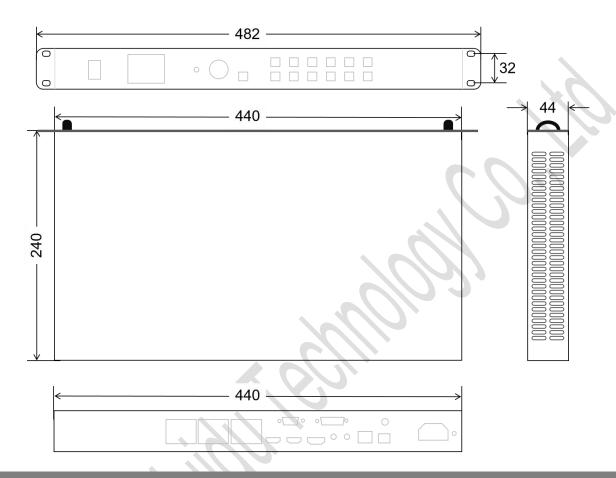
<sup>\*</sup> The schematic diagram of the remote control is as follows. It is optional. If you need it, please contact Huidu sales or technical support in advance.





# 5. Product Size

Unit: mm



# 6. Basic Parameters

4	Parameters	Parameter Value	
Chassis specifications		1U Standard	
Electrical	Power supply	AC 100 ~ 240V 50/60Hz	
Specifications	Power consumption	50W	
Work	Working temperature (°ℂ)	-20 °C ~55 °C	
Environment	Working humidity (RH)	20%RH~90%RH (no condensation)	
Storage Environment	Storage temperature (℃)	-20 ℃ ~60 ℃	



	Storage humidity (RH)	10%RH~95%RH (no condensation)
Equipment	Size	W×H×D/482mm×44mm×240mm
Specifications	Net weight	3 kg
Packing	Packing size	W×H×D/ 515mm×82mm×355mm
specifications	Packing weight	4.1 kg
	HD-VP1220S	1PCS
	USB cable	1PCS
	HDMI cable	1PCS
Packing List	DVI cable	1PCS
	Power cord	1PCS
	Wi-Fi Antenna	1PCS
	Certificate	1PCS

#### illustrate:

1. Welcome to choose Huidu Technology products. There may be slight differences between the product pictures in the specifications and the actual appearance (including the number of holes in the product size diagram, etc.). If you have any questions, please contact technical support or salesperson for confirmation.