

# PRODUCT SPECIFICATION

Two-in-One Video Processor

**HD-VP820A** 



# 1. System Overview

HD-VP820A is a two-in-one video processor that integrates a traditional video processor and 8 -way Gigabit Ethernet output. It not only simplifies the on-site environment construction, but also improves the reliability of the product. It supports 5- way synchronous signal input and can be used in hotels, shopping malls, conference rooms, exhibitions, studios and other occasions that require synchronous playback; in addition, the device also supports point-to-point input/output, allowing the LED screen to display clearer images.

## 2. Connection Diagram





# 3. Product Features

#### Input

- Supports up to 4096\*2160 @60Hz synchronous signal input;
- Supports 2-channel HDMI, 1-channel DP, 1-channel DVI, and 1-channel VGA signal input, and can switch multiple video signals at will;
- Supports 1-way TRS 3.5mm standard dual-channel audio input and HDMI /DP audio input.

#### **Output**

- Supports two-screen layout, maximum support 2×4K windows;
- Standard 8-channel Gigabit network port, directly cascade receiving card;
- The maximum control is 5.2 million pixels, the maximum horizontal support is 8192 pixels, and the maximum vertical support is 4000 pixels;
- 1 TRS 3.5mm standard two-channel audio output.

#### **Functions**

- Video signals can be switched, cropped, and scaled at will;
- Support 16 scene presets and calls;
- Support brightness adjustment, color temperature adjustment and key lock functions;
- Support arbitrary overlapping of network ports and non-rectangular load;
- Support point-to-point display and limited to full conversion;
- Support RS232 serial port protocol control and docking with central control equipment;
- Support Wi -Fi Station mode, AP mode, Wi-Fi Station + AP mode;
- Support mobile phone APP wireless control;
- Support infrared remote control (optional);
- Support SDI (optional);
- Support 4G (customized).



# 4. Appearance Description

#### **Front Panel:**

#### **Standard front panel:**



#### **SDI front panel:**



#### 4G model front panel:



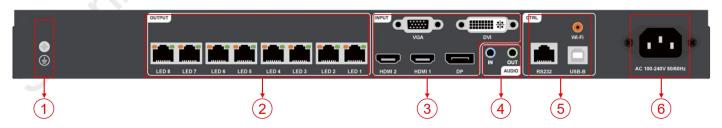
Key Description				
Serial number	button	illustrate		
1	Power switch	Control AC power input		
2	LCD display screen	Debug display menu, screen parameters and other information		
3	IR	Receive infrared remote control (optional)		
4	MENU knob	Press the knob to enter a submenu or confirm a selection Rotate the knob to select menu items or adjust parameters		
5	ESC	Exit key /Back key		
6	WIN1~WIN2	Select an open window		



	Function key: The key multiplexing function is digital salestion, generally				
	Function key: The key multiplexing function is digital selection, generally				
	used when setting the resolution				
	Select HDMI 1 signal playback				
HDMI1	Function key: The key multiplexing function is digital selection, generally				
	used when setting the resolution				
	Select HDMI 2 signal playback				
HDMI2	Function key: The key multiplexing function is digital selection, general				
	used when setting the resolution				
	Select DP signal to play				
DP	Function key: The key multiplexing function is digital selection, general				
	used when setting the resolution				
	Select DVI signal playback				
DVI	Function key: The key multiplexing function is digital selection, general				
	used when setting the resolution				
VCA/DEV)	Select VGA signal playback ( SDI/4G models do not have VGA, and the				
VGA(REV)	REV button is reserved but has no actual function)				
	Quickly call up the preset mode call menu				
MODE	Function key: The key multiplexing function is digital selection, general				
	used when setting the resolution				
	click freeze button				
FREEZE	Function key: The key multiplexing function is digital selection, general				
	used when setting the resolution				
	One-touch black screen button				
BLACK	Function key: The key multiplexing function is digital selection, general				
	used when setting the resolution				
	Quickly enter the two- screen layout menu				
PXP	Function key: The key multiplexing function is digital selection, general				
	used when setting the resolution				
BRIGHT	Quickly call out the brightness setting button				

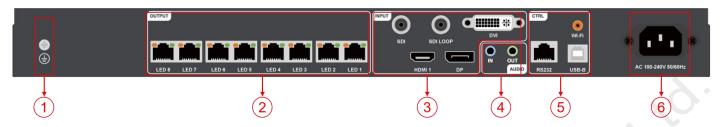
#### **Rear Panel:**

# Standard rear panel:

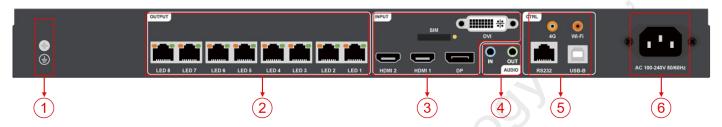




## SDI model rear panel:



#### 4G model rear panel:



Input Interface			
Serial number	Interface Name	quantity	illustrate
	DP1.2		DP input interface Interface type: DP Signal standard: DP1.2 backward compatible Resolution: VESA standard, ≥720×480@60Hz, ≤4096× 2160@60Hz Support audio input
3	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  Support audio input  HDMI 1.4 input interface × 1 (HDMI 2)  Interface type: HDMI-A  Signal standard: HDMI 1.4 backward compatible



	1		
			Resolution: VESA standard, ≥800×600@60Hz, ≤
			4096x2160@30Hz
			Support audio input
		1	DVI input interface
	DVI		Interface type: DVI-I socket
			Signal standard: DVI1.0, HDMI1.3 backward compatible
			Resolution: VESA standard, ≥800×600@60Hz, ≤1920×
			1200@60Hz
	VGA	1	VGA input
			Interface type: DB15 socket
			Signal standard: R, G, B, Hsync, Vsync: 0 to1Vpp±3dB (0.7V
			Video+0.3v Sync)
			75 ohm black level: 300mV Sync-tip: 0V
			Resolution: VESA standard, ≥720×480@60Hz, ≤1920×
			1080@60Hz
	SDI		SDI Input
			Interface type: BNC
			Signal standards: SD-SDI, HD-SDI, 3G-SDI
			Resolution: VESA standard, ≤1920×1080@60Hz
4	AUDIO IN	1	TRS 3.5mm dual channel audio input interface
6	power supply	1	AC 100 ~ 240V 50/60Hz
	V	L	<u>I</u>

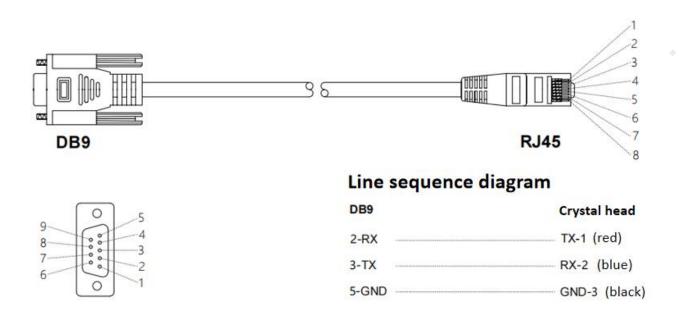


Output Interface			
Serial number	Interface Name	quantity	illustrate
1	Grounding interface	1	Anti-static/leakage protection, personal safety protection and equipment normal operation protection
2	Gigabit Ethernet	8	Used for cascading receiving cards, transmitting RGB data stream, each network port controls 650,000 images, supports docking multi-function cards
3	SDI-LOOP	1	SDI signal loop-out interface Interface type: BNC Signal standards: SD-SDI, HD-SDI, 3G-SDI Resolution: VESA standard, ≤1920x1080@60Hz
4	AUDIO OUT	1	TRS 3.5mm dual-channel audio output interface  Connect to an audio amplifier for high-power external speakers

Control interface			
Serial number	Interface Name	quantity	illustrate
		iC	SIM card slot
3	SIM card slot	1	Currently only standard cards are supported: size W×H×D/
			25mmx15mmx0.8mm
	RS232	1	RJ45 interface, connected to the central control device
5	USB-B	1	Connect to a computer for debugging the device
	Wi-Fi antenna interface	1	Connect a Wi-Fi antenna to enhance Wi-Fi signal
5	4G antenna interface	1	Connect a 4G antenna to enhance 4G signal



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

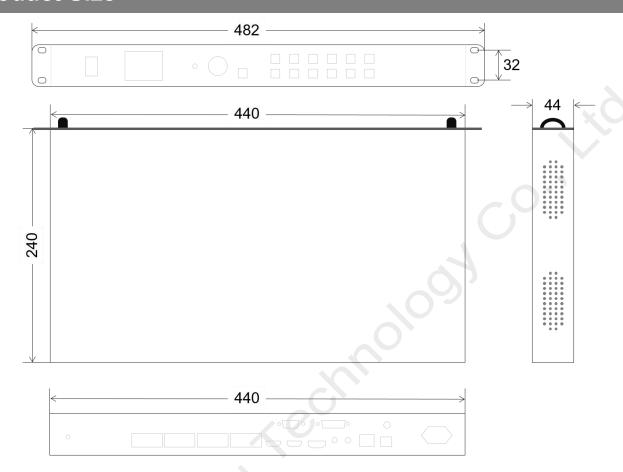


\* The remote control diagram is as follows. It is optional. If you have any needs, please contact Grayscale sales or technical support in advance.





# 5. Product Size





# 6. Basic Parameters

	Parameters	Parameter Value
Cha	assis specifications	1U Standard
Electrical	power supply	AC 100 ~ 240V 50/60Hz
specifications	Power consumption	50W
Work Environment	Operating temperature (°C)	-20 ℃ ~55 ℃
Liviloiiiioiit	Operating humidity (RH)	20%RH~90%RH (no condensation)
Storage Environment	Storage temperature (°C)	-20 ℃ ~60 ℃
Liviloninent	Storage humidity (RH)	10%RH~95%RH (no condensation)
Equipment	size	W×H×D/482mm×44mm×240mm
Specifications	net weight	2.9 kg
Packing	Packing size	W×H×D/ 515mm×82mm×355mm
specifications	Packing weight	4 kg
	HD-VP820A	1PCS
	USB Cable	1PCS
	HDMI Cable	1PCS
Packing List	DVI Cable	1PCS
	Power Cable	1PCS
	Wi-Fi ANT	1PCS
	Certificate	1PCS

#### illustrate:

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