



# PRODUCT SPECIFICATION

Two-in-One Video Processor

**HD-VP620A**

V1.2

## 1. System Overview

HD-VP 620A is a two-in-one video processor that integrates a traditional video processor and 6-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 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 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 two-channel audio input and HDMI/DP audio input.

### Output

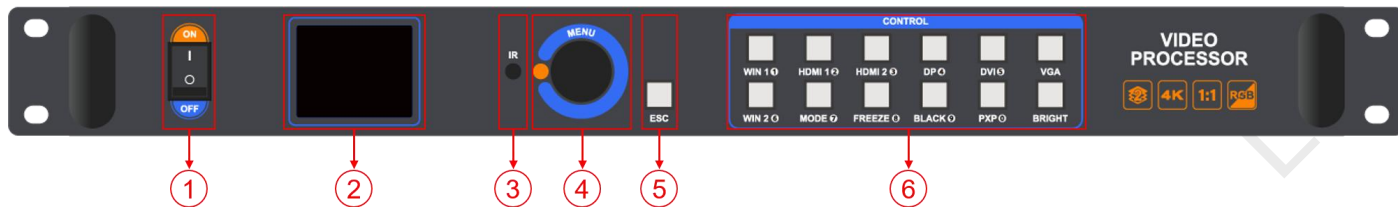
- Supports two-screen layout, maximum support 2×4K windows;
- Standard 6-channel Gigabit Ethernet port, cascaded with receiving card;
- The maximum control is 3.9 million pixels, the maximum horizontal support is 8192 pixels, and the maximum vertical support is 4000 pixels ;
- 1 TRS 3.5mm standard two-channel audio output.

### Function

- 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).

## 4. Appearance Description

### Front Panel:

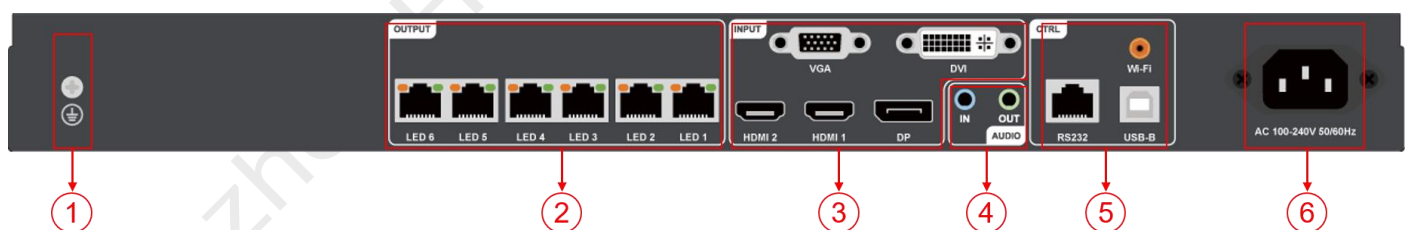


#### Key Description

| 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 (infrared) remote control receiver | Infrared remote control receiver                                                                                                              |
| 4             | MENU knob                             | Press the knob to enter a submenu or confirm a selection<br>Rotate the knob to select menu items or adjust parameters                         |
| 5             | ESC                                   | Exit key /Back key                                                                                                                            |
| 6             | WIN1~WIN2                             | Select an open window<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution         |
|               | HDMI1                                 | Select HDMI 1 signal playback<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution |
|               | HDMI2                                 | Select HDMI 2 signal playback<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution |
|               | DP                                    | Select DP signal to play<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution      |

|  |        |                                                                                                                                                           |
|--|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | DVI    | Select DVI signal playback<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution                |
|  | VGA    | Select VGA signal playback                                                                                                                                |
|  | MODE   | Quickly call up the preset mode call menu<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution |
|  | FREEZE | click freeze button<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution                       |
|  | BLACK  | One-touch black screen button<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution             |
|  | PXP    | Quickly enter the two- screen layout menu<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution |
|  | BRIGHT | Quickly call out the brightness setting button                                                                                                            |

## Rear Panel:



| Input Interface |                |          |                                                                                                                                                                                                                       |
|-----------------|----------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Serial number   | Interface Name | quantity | illustrate                                                                                                                                                                                                            |
| 3               | DP1.2          | 1        | <p>DP input interface</p> <p>Interface type: DP</p> <p>Signal standard: DP1.2 backward compatible</p> <p>Resolution: VESA standard, <math>\geq 720 \times 480 @ 60\text{Hz}</math>, <math>\leq 4096 \times</math></p> |

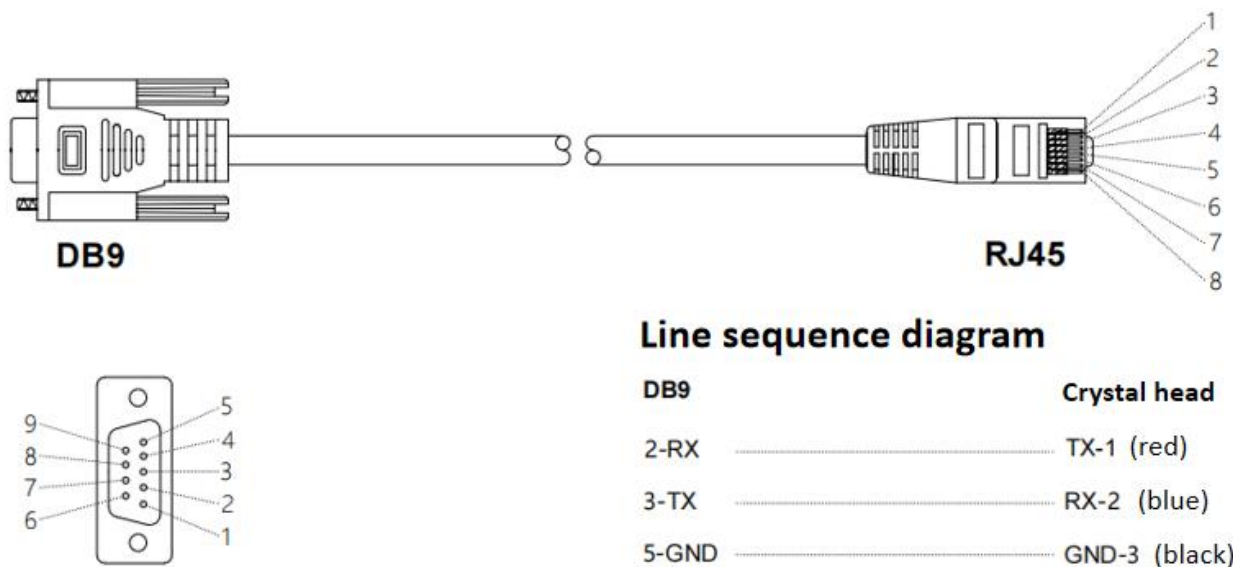
|   |          |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---|----------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |          |   | 2160@60Hz<br>Support audio input                                                                                                                                                                                                                                                                                                                                                                                                                 |
|   | HDMI1~2  | 2 | HDMI 2.0 input interface × 1 (HDMI 1)<br><br>Interface type: HDMI-A<br><br>Signal standard: HDMI 2.0 backward compatible<br><br>Resolution: VESA standard, ≥800×600@60Hz, ≤4096×<br>2160@60Hz<br>Support audio input<br><br>HDMI 1.4 input interface × 1 (HDMI 2)<br><br>Interface type: HDMI-A<br><br>Signal standard: HDMI 1.4 backward compatible<br><br>Resolution: VESA standard, ≥800×600@60Hz, ≤<br>4096x2160@30Hz<br>Support audio input |
|   | DVI      | 1 | DVI input interface<br>Interface type: DVI-I socket<br><br>Signal standard: DVI1.0, HDMI1.3 backward compatible<br><br>Resolution: VESA standard, ≥800×600@60Hz, ≤1920×<br>1200@60Hz                                                                                                                                                                                                                                                             |
|   | VGA      | 1 | VGA input<br>Interface type: DB15 socket<br><br>Signal standard: R, G, B, Hsync, Vsync: 0 to1Vpp±3dB (0.7V<br>Video+0.3v Sync)<br>75 ohm black level: 300mV Sync-tip: 0V<br><br>Resolution: VESA standard, ≥720×480@60Hz, ≤1920×<br>1080@60Hz                                                                                                                                                                                                    |
| 4 | AUDIO IN | 1 | TRS 3.5mm dual channel audio input interface                                                                                                                                                                                                                                                                                                                                                                                                     |

|   |              |   |                       |
|---|--------------|---|-----------------------|
| 6 | power supply | 1 | AC 100 ~ 240V 50/60Hz |
|---|--------------|---|-----------------------|

| 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    | 6        | Used for cascading receiving cards, transmitting RGB data stream, each network port controls 650,000 images, supports docking multi-function cards |
| 4                | AUDIO OUT           | 1        | TRS 3.5mm dual-channel audio output interface<br>Connect to an audio amplifier for high-power external speakers                                    |

| Control interface |                         |          |                                                          |
|-------------------|-------------------------|----------|----------------------------------------------------------|
| Serial number     | Interface Name          | quantity | illustrate                                               |
| 5                 | RS232                   | 1        | R J45 interface, connected to the central control device |
|                   | USB-B                   | 1        | Connect to a computer for debugging the device           |
|                   | Wi-Fi antenna interface | 1        | Connect the Wi-Fi antenna, , enhance Wi-Fi 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.

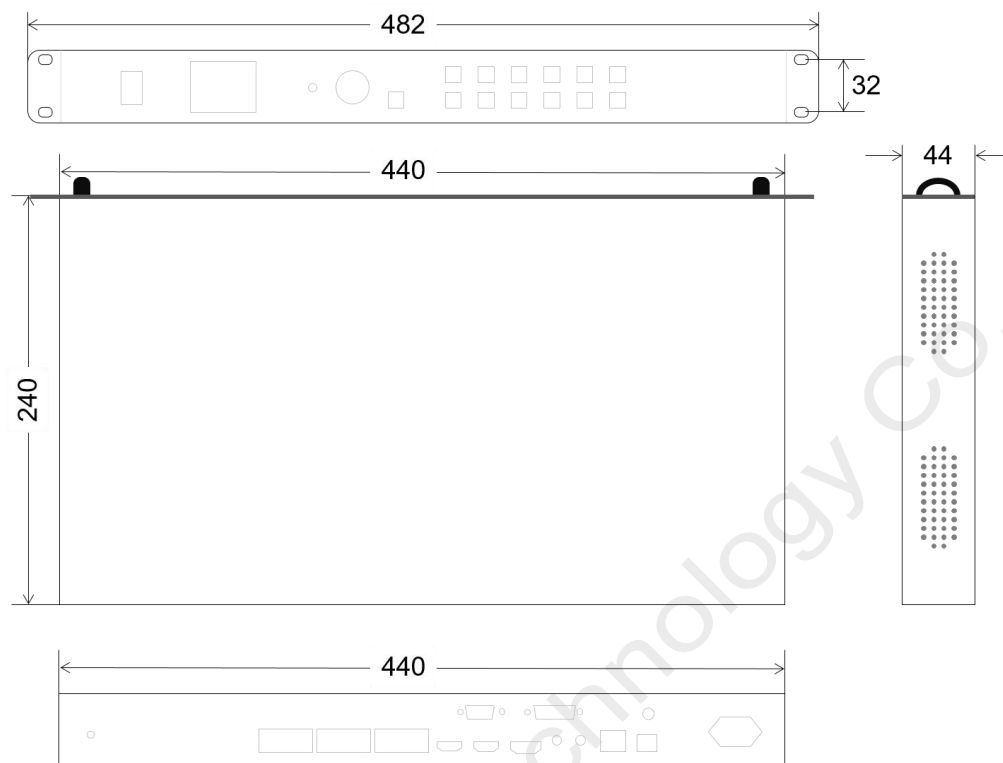


\* The remote control diagram is as follows. It is optional. If you have any needs, please contact Grayscale sales or technical support in advance.





## 5. Product size



## 6. Basic parameters

| Parameters                |                            | Parameter Value               |
|---------------------------|----------------------------|-------------------------------|
| Chassis specifications    |                            | 1U Standard                   |
| Electrical specifications | power supply               | AC 100~240V 50/60Hz           |
|                           | Power consumption          | 50W                           |
| Work Environment          | Operating temperature (°C) | -20 °C ~55 °C                 |
|                           | Operating humidity (RH)    | 20%RH~90%RH (no condensation) |
| Storage Environment       | Storage temperature (°C)   | -20 °C ~60 °C                 |
|                           | Storage humidity (RH)      | 10%RH~95%RH (no condensation) |
| Equipment Specifications  | size                       | W×H×D/482mm×44mm×240mm        |
|                           | net weight                 | 2.9kg                         |
| Packing specifications    | Packing size               | W×H×D/ 515mm×82mm×355mm       |
|                           | Packing weight             | 4 kg                          |
| Packing List              | HD-VP620A                  | 1PCS                          |
|                           | USB Cable                  | 1PCS                          |
|                           | HDMI Cable                 | 1PCS                          |
|                           | 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.