灰度科技
HUIDU TECHNOLOGY

# PRODUCT SPECIFICATION

All-in-one Video Processor

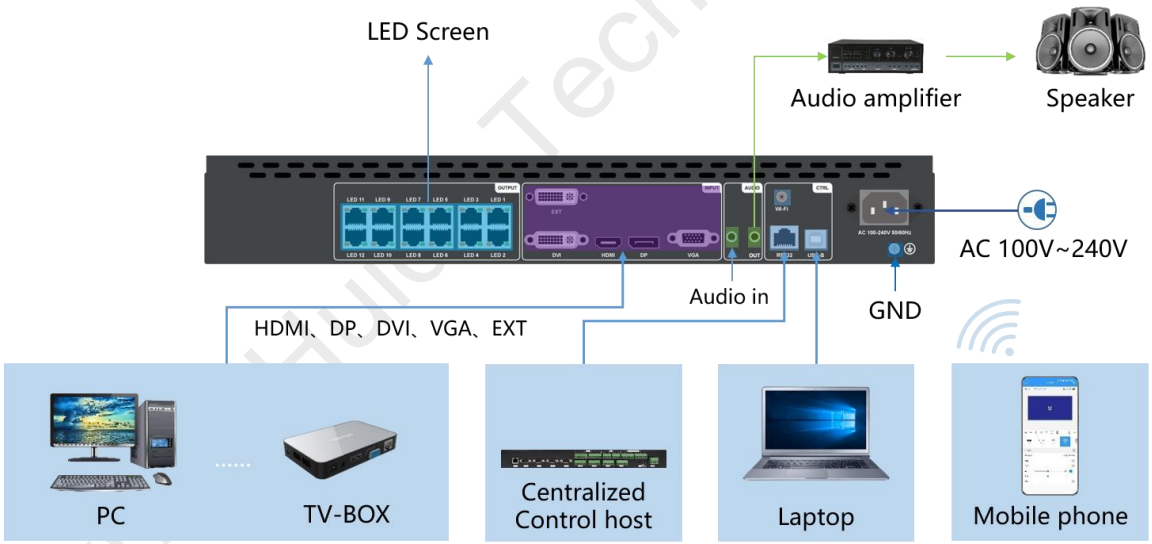
**HD-VP1220C**

V1.0

# 1. Overview

HD-VP1220C is a two-in-one video processor that integrates a traditional video processor and 12 -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. Features

## Input

- Supports up to 3840*2160 @60Hz synchronous signal input ;
- Supports 1-channel HDMI, 1-channel DP, 1-channel DVI, 1-channel VGA and 1-channel EXT 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

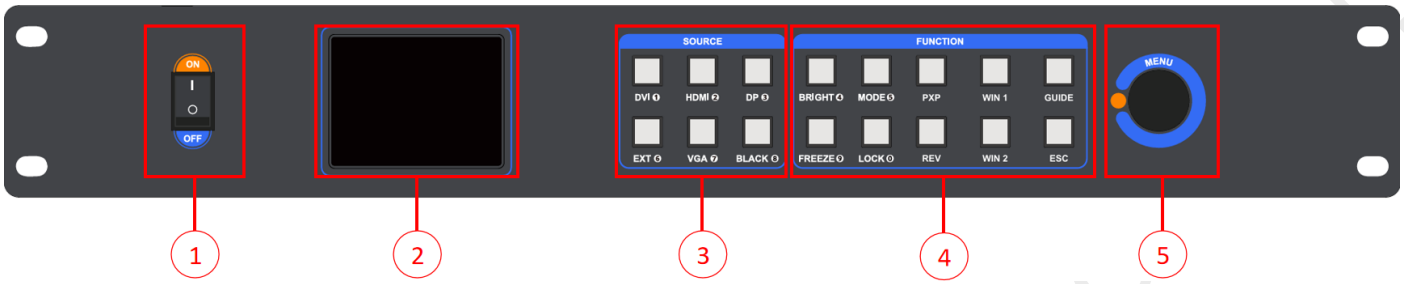
- Supports two-screen layout, maximum support 2×4K windows;
- Standard 12-channel Gigabit network port, directly cascade receiving card;
- The maximum control is 7.8 million pixels, the maximum horizontal support is 16000 pixels, and the maximum vertical support is 4000 pixels ;
- 1 TRS 3.5mm standard two-channel audio output.

## Functions

- Video signals can be switched, cropped, and scaled at will;
- Support 8 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;
- Supports equipment binding.

# 4. Appearance Description

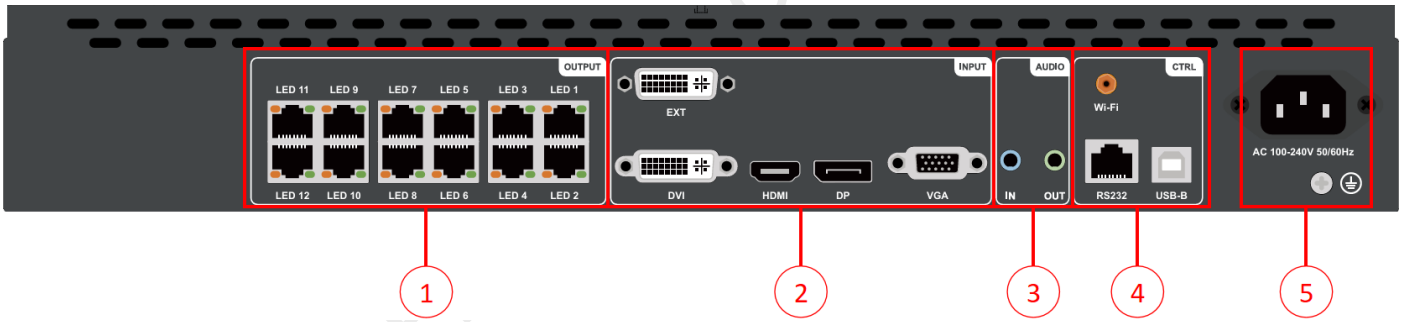
## Front Panel:




| 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 | DVI | Select DVI signal playback<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution |
| | HDMI | Select HDMI 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 |
| | EXT | Select EXT signal playback<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution |
| | VGA | Select VGA signal playback<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 |
| 4 | BRIGHT | Quickly call out the brightness setting button<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution |
| | 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 |

| | | |
|---|---|---|
| | PXP | Quickly enter the two- screen layout menu |
| | WIN1~WIN2 | Select an open window |
| | GUIDE | Quickly call out the "intelligent navigation" setting interface |
| | FREEZE | click freeze button<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution |
| | LOCK | Button lock to prevent misoperation.<br>Function key: The key multiplexing function is digital selection, generally used when setting the resolution |
| | REV | Retain the function keys. |
| | ESC | Exit key /Back key |
| 5 | MENU knob | Press the knob to enter a submenu or confirm a selection<br>Rotate the knob to select menu items or adjust parameters |

## Rear Panel:



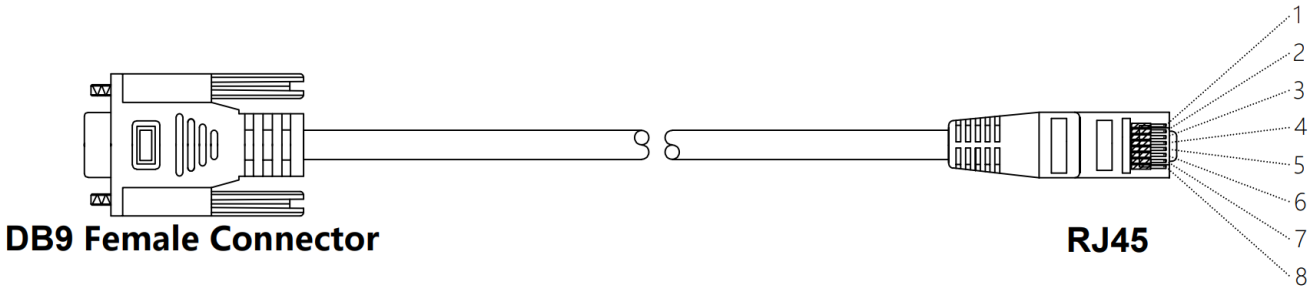

| **Input Interface** | | | |
|---|---|---|---|
| Serial number | Interface Name | quantity | illustrate |
| 2 | DP1.2 | 1 | DP input interface<br>Interface type: DP<br>Signal standard: DP1.2 backward compatible<br>Resolution: VESA standard，≥800×600@60Hz，≤3840×2160@60Hz<br>Support audio input |
| | HDMI2.0 | 1 | HDMI input interface<br>Interface type: HDMI-A<br>Signal standard: HDMI 2.0 backward compatible |

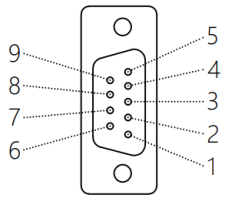
| | | | |
|---|---|---|---|
| | | | Resolution: VESA standard,≥800×600@60Hz，≤3840×2160@60Hz<br>Support audio input |
| | VGA | 1 | VGA input interface<br>Interface type: DB15 socket<br>Signal standard: R, G, B, Hsync, Vsync: 0 to1Vpp±3dB (0.7V Video+0.3v Sync)<br>75 ohm black level: 300mV Sync-tip: 0V<br>Resolution: VESA standard，≥800×600@60Hz，≤1920×1080p@60Hz |
| | DVI | 1 | DVI input interface<br>Interface type: DVI-I socket<br>Signal standard: DVI1.0 backward compatible<br>Resolution: VESA standard，≥800×600@60Hz，≤1920×1200@60Hz |
| | EXT | 1 | Expansion interface: DVI is the default standard configuration.<br>DVI input interface<br>Interface type: DVI-I socket<br>Signal standard: DVI1.0 backward compatible<br>Resolution: VESA standard，≥800×600@60Hz，≤1920×1200@60Hz |
| 3 | AUDIO IN | 1 | TRS 3.5mm dual channel audio input interface |
| 5 | Power supply | 1 | AC 100~240V 50/60Hz |

| Output Interface | | | |
|---|---|---|---|
| Serial number | Interface Name | quantity | illustrate |
| 1 | Gigabit Ethernet | 12 | 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<br>Connect to an audio amplifier for high-power external speakers |
| 5 | Grounding interface | 1 | Anti-static/leakage protection, personal safety protection and equipment normal operation protection |

| Control interface | | | |
|---|---|---|---|
| Serial number | Interface Name | quantity | illustrate |
| 4 | Wi-Fi antenna interface | 1 | Connect a Wi-Fi antenna to enhance Wi-Fi signal |
| | RS232 | 1 | RJ45 interface, connected to the central control device |
| | USB-B | 1 | Connect to a computer for debugging the device |

* 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.



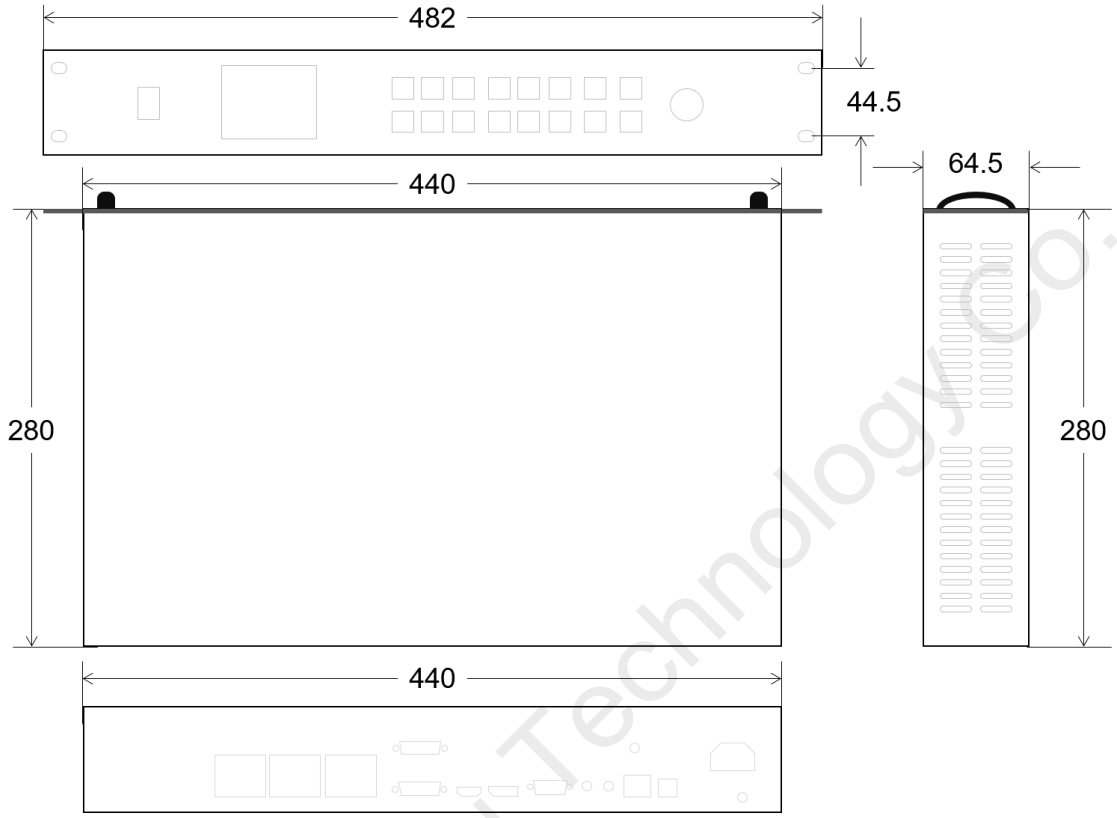




**Line Ordering:**

| DB9 female connector | RJ45 connector |
|---|---|
| 2-RX | TX-1(Red) |
| 3-TX | RX-2(Blue) |
| 5-GND | GND-3(Black) |

# 5. Dimensions

Dimensions (mm):




Tolerance: ±0.3 mm

# 6. Basic Parameters

| Parameters | | Parameter Value |
|---|---|---|
| Chassis specifications | | 1.5U Standard |
| Electrical specifications | power supply | AC 100~240V 50/60Hz |
| | Power consumption | 50W |
| Work Environment | Operating temperature (°C) | -20℃ ~55℃ |
| | Operating humidity (RH) | 20%RH~90%RH (no condensation) |
| Storage Environment | Storage temperature (℃) | -20℃~60℃ |
| | Storage humidity (RH) | 10%RH~95%RH (no condensation) |

| | | |
|---|---|---|
| Equipment Specifications | size | W×H×D/482mm×64.5mm×280mm |
| | net weight | 3.65kg |
| Packing specifications | Packing size | W×H×D/ 515mm×120mm×380mm |
| | Packing weight | 4.7kg |

**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.