

PRODUCT SPECIFICATION

2-in-1 Video Processor

HD-VP2430

V1.0

1. Overview

HD-VP2430 is a 2-in-1 video processor, which integrates traditional video processor, 24-way Gigabit network port output, and 3-way optical output. This not only simplifies setting up the field environment, but also improves the reliability of the product. Support 5-way signal interface input, which can be used for hotels, shopping malls, conference rooms, exhibitions, studios and other scenes that need to be played simultaneously. In addition, the device also supports point-to-point input/output, allowing the LED display to show a clearer picture.

2. Connection Diagram



3. Features

Input

- Supports up to 4096*2160 @60Hz synchronous signal input ;
- Supports 4- channel HDMI and 1-channel DP signal input, and can switch multiple video signals at will;
- Supports 1 TRS 3.5mm standard dual-channel audio input and HDMI /DP audio input.

Output

- Supports any layout of three screens , and supports up to 3 x 4K windows;
- Standard 24- channel Gigabit Ethernet ports and 3-channel optical fiber ports , directly cascaded to receiving cards;
- Maximum control of 15.72 million pixels, maximum horizontal support of 16,384 pixels, maximum vertical support of 8,192 pixels ;
- 1 TRS 3.5mm standard two-channel audio output.

Function

- Supports visualization of video signal quality, with the lower computer displaying the first letters of High, Medium, and Low;
- Video signals can be switched, cropped, and scaled at will;
- Support 16 scene presets and calls ;
- Support brightness adjustment and key lock functions ;
- Support arbitrary overlap of network ports ;
- Support point-to-point display and limited to full conversion;

- Supports displaying signal color format on the lower computer;
- Support RS232 serial port protocol control and docking with central control equipment;
- Support Wi-Fi AP mode;
- Support mobile phone APP wireless control;
- Support infrared remote control (optional) .

4. Appearance

Front panel:

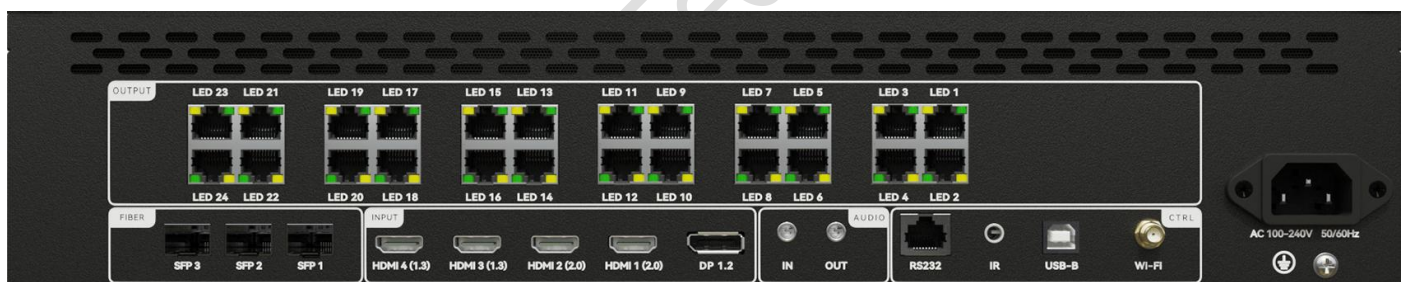


Key Description	
Key	Description
Power switch	Control AC power input
LCD display screen	Debug display menu, screen parameters and other information
IR	Receive infrared remote control (optional)
MENU knob	Press the knob to enter a sub menu or confirm a selection Rotate the knob to select menu items or adjust parameters

WIN1~WIN 3	Select an open window Function key: The key multiplexing function is digital selection, corresponding to numbers 1~3
REV	Reserved buttons Function key: The key multiplexing function is digital selection, corresponding to the number 6
MODE	Quickly call up the preset mode call menu Function key: The key multiplexing function is digital selection, corresponding to the number 7
BRIGHT	Quickly call out the brightness setting button Function key: The key multiplexing function is digital selection, corresponding to the number 8
ESC	Exit key/Back key
FREEZE	One-click freeze button
BLACK	One-touch black screen button
DP	Select DP signal to play Function key: The key multiplexing function is digital selection, corresponding to the number 4
HDMI 1	Select HDMI 1 signal playback Function key: The key multiplexing function is digital selection, corresponding to the number 5

HDMI2	Select HDMI 2 signal playback Function key: The key multiplexing function is digital selection, corresponding to the number 9
HDMI3	Select HDMI 3 signal playback Function key: The key multiplexing function is digital selection, corresponding to the number 0
HDMI4	Select HDMI 4 signal playback
REV	Reserved buttons

Rear Panel:



Input Interface		
Name	Quantity	Description
DP1.2	1	DP input interface Interface type: DP Signal standard: DP1.2 backward compatible

		Resolution: VESA standard, $\geq 720 \times 480 @ 60\text{Hz}$, $\leq 4096 \times 2160 @ 60\text{Hz}$ Support color space: RGB4:4:4/YCbCr4:4:4/YCbCr4:2:2 Support color depth: 8bit Support maximum width: 8192 Maximum height: 8192 Supports accompanying audio
HDMI1~2	2	HDMI2.0 input interface $\times 2$ Interface type: HDMI-A Signal standard: HDMI 2.0 backward compatible Resolution: VESA standard, $\geq 800 \times 600 @ 60\text{Hz}$, $\leq 4096 \times 2160 @ 60\text{Hz}$ Supported color space: RGB4:4:4/YCbCr4:4:4 /YCbCr4:2:2 Support color depth: 8bit Support maximum width: 8192 Maximum height: 8192 Supports accompanying audio
HDMI 3 ~ 4	2	HDMI 1.3 input interface $\times 2$ Interface type: HDMI-A Signal standard: HDMI 1.3 backward compatible Resolution: VESA standard, $\geq 800 \times 600 @ 60\text{Hz}$, $\leq 1920 \times 1200 @ 60\text{Hz}$ Supported color space: RGB4:4:4/YCbCr4:4:4 /YCbCr4:2:2 Support color depth: 8bit Supported maximum width: 2048 Maximum height: 2048 Supports accompanying audio

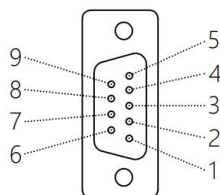
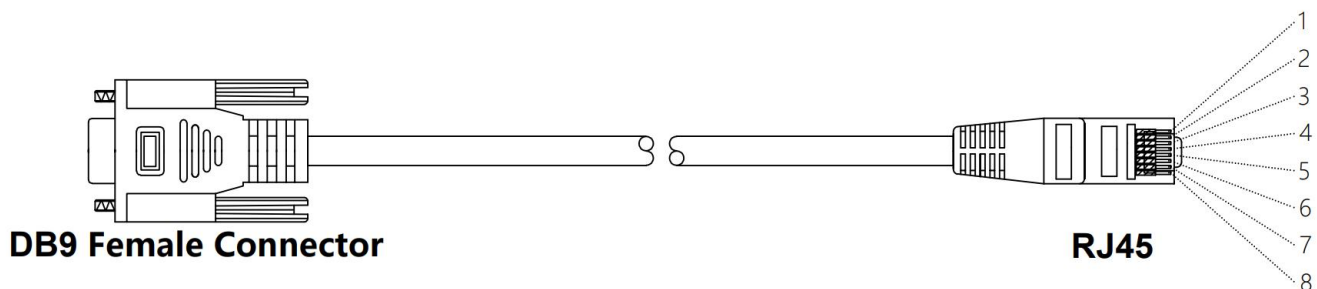
AUDIO IN	1	TRS 3.5mm dual channel audio input interface
power supply	1	AC 100 ~ 240V 50/60Hz

Output Interface		
Name	Quantity	Description
Gigabit Ethernet	twenty four	Used for cascading receiving cards, transmitting RGB data stream, each network port controls 650,000 pixels , supports docking multi-function cards
Fiber Optic Port	3	10G optical fiber interface: Each optical port controls 5.24 million pixels SFP1 sends data from network ports 1 to 8, SFP2 sends data from network ports 9 to 16, and SFP3 sends data from network ports 17 to 24 Supports use with single-mode optical modules: single-mode dual-core transmission distance $\leq 10\text{km}$ (actually tested 2km)
AUDIO OUT	1	TRS 3.5mm dual-channel audio output interface Connect to an audio amplifier for high-power external speakers
Grounding interface	1	Anti-static/leakage protection, personal safety and equipment normal operation

Control interface		
Name	Quantity	Description

RS232	1	RJ45 interface, connected to the central control device
IR antenna interface	1	Used to connect external infrared remote control extension cable
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

* The schematic diagram of the RJ45 to DB9 connection cable is as follows. It is optional. If you need it, please contact Huidu sales or technical support engineer in advance.



Line Ordering:

DB9 female connector

RJ45 connector

2-RX TX-1(Red)

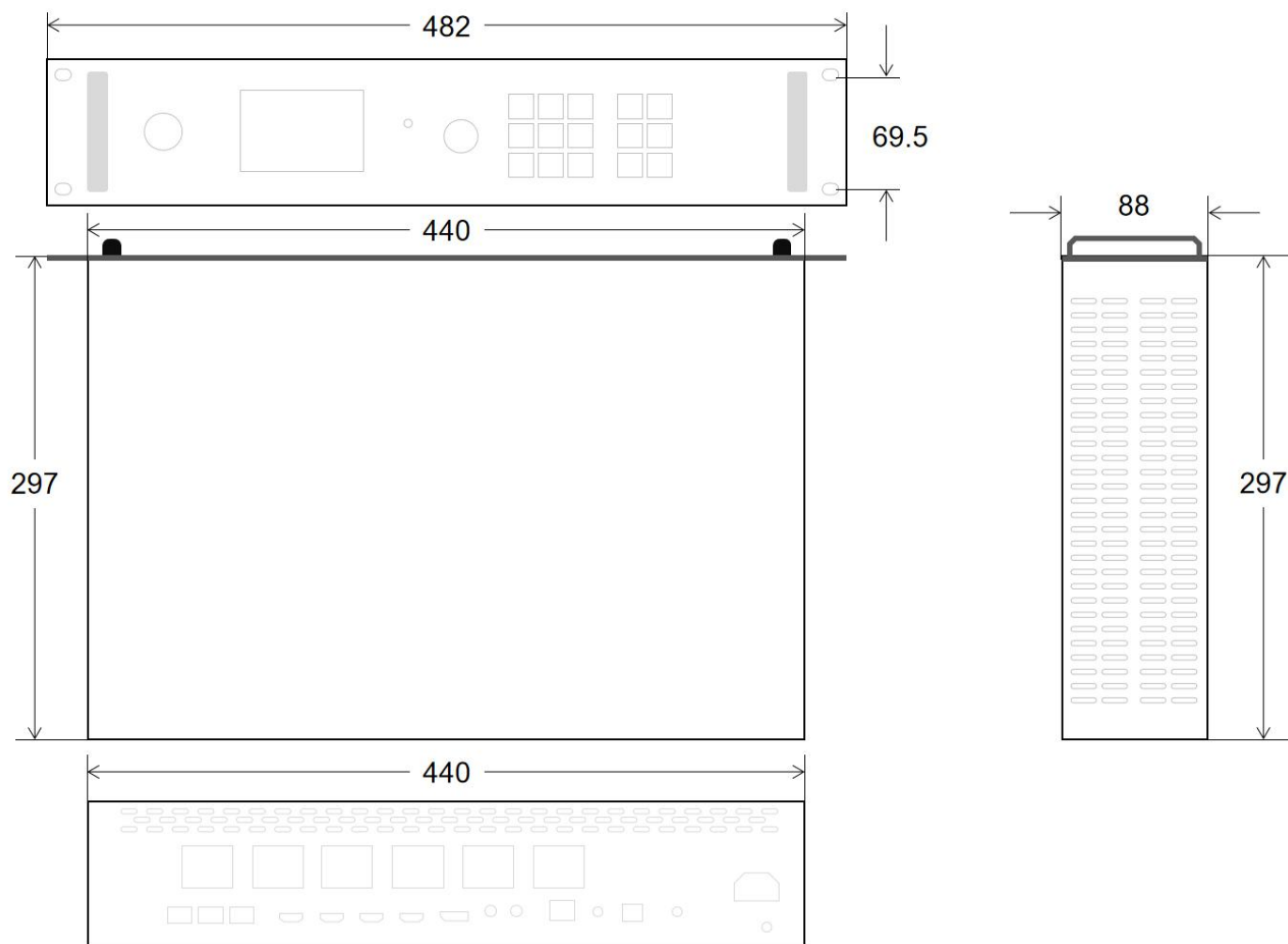
3-TX RX-2(Blue)

5-GND GND-3(Black)

* The remote control is shown below, it is optional, if you need it, please contact Huidu sales or technical support engineer in advance.



5. Dimension



6. Basic Parameters

Item		Parameter value
Chassis Specifications		2U standard
Electrical Specifications	Rated Voltage(V)	AC 100-240V
	Power consumption	50W
Working Environment	Working Temperature(°C)	-20°C~55°C
	Working Environment Humidity(%RH)	20%RH~90%RH (non-condensing)
Storage Environment	Storage Temperature(°C)	-20°C~60°C
	Storage Environment Humidity (%RH)	10%RH~95%RH (non-condensing)
Equipment Specifications	Sizes	W×H×D/482mm×88mm×297mm
	Net Weight	5.2KG
Packing Specification	Packing Size	W×H×D/508mm×154mm×390mm
	Packing Size	6.9KG
Packing List	HD-VP2430	1PCS
	Power Cable	1PCS
	USB Cable	1PCS
	DP Cable	1PCS

	HDMI Cable	2PCS
	Wi-Fi ANT	1PCS
	Certificate	1PCS

Optional list :

Fiber Optic Module	SFP optical module, used for optical port cascading splicing
Fiber Optic Cable	Optical fiber lines, used for long-distance signal transmission
Remote Control	Infrared remote control for remote control of the processor

Illustrate:

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