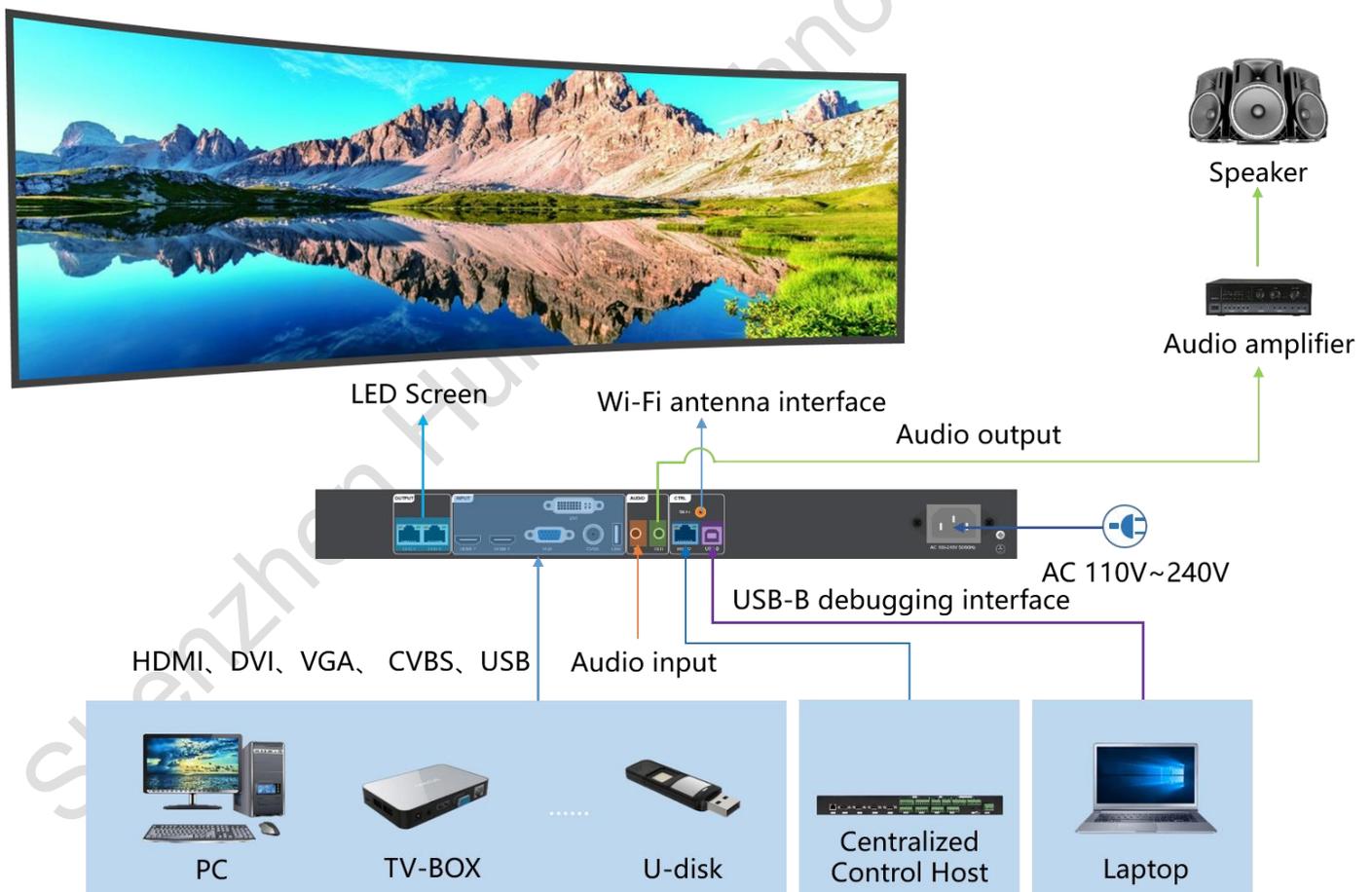# Product Specification

All-in-one LED Controller

HD-VP210H

V1.0

1. System Overview

HD-VP210H is a three-in-one video processor that integrates traditional video processor, 2-way Gigabit network port output, and U disk playback functions. It not only simplifies the construction of the on-site environment, but also improves the reliability of the product. It supports 5 channels of synchronous signal input and 1 channel of USB 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 to allow the LED display to display A clearer picture.

2. Connection Diagram

LED Screen
Wi-Fi antenna interface
Audio output
Speaker
Audio amplifier
AC 110V~240V
USB-B debugging interface
HDMI、DVI、VGA、 CVBS、USB   Audio input
PC   TV-BOX   U-disk   Centralized Control Host   Laptop

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3. Product Characteristics

Input

- Supports 2 channels of HDMI, 1 channel of DVI, 1 channel of VGA, and 1 channel of CVBS signal input, which can be switched at will;

- 1 channel USB input supports direct playback of videos and pictures in various mainstream formats in the root directory of the USB flash drive, and supports up to 1080P high-definition video playback;

- Supports 1 channel TRS 3.5mm standard two-channel audio input and HDMI audio input.
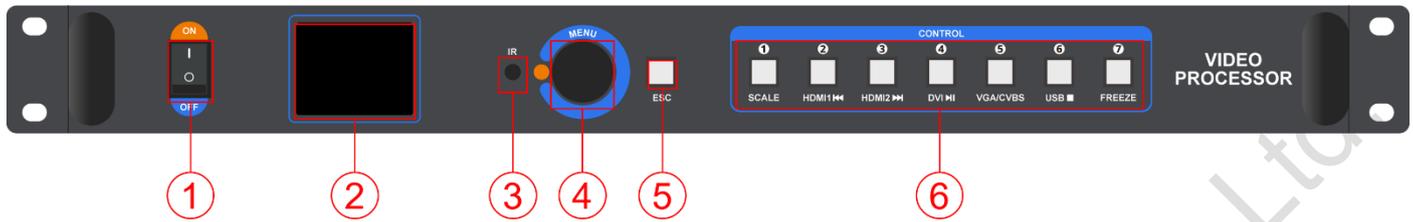
Output

- Comes standard with 2-way Gigabit network ports, which can be directly cascaded to the receiving card;

- The maximum control is 1.3 million pixels, with a maximum horizontal support of 3840 pixels and a maximum vertical support of 2500 pixels;

- 1 channel TRS 3.5mm standard two-channel audio output.

Features

- Support limited transfer to complete;

- Video signals can be switched, cropped, and zoomed arbitrarily;

- Supports 16 scene presets and calls;

- Support brightness and color temperature adjustment;

- Supports docking with central control equipment;

- Standard Wi-Fi, supports wireless control via mobile APP;
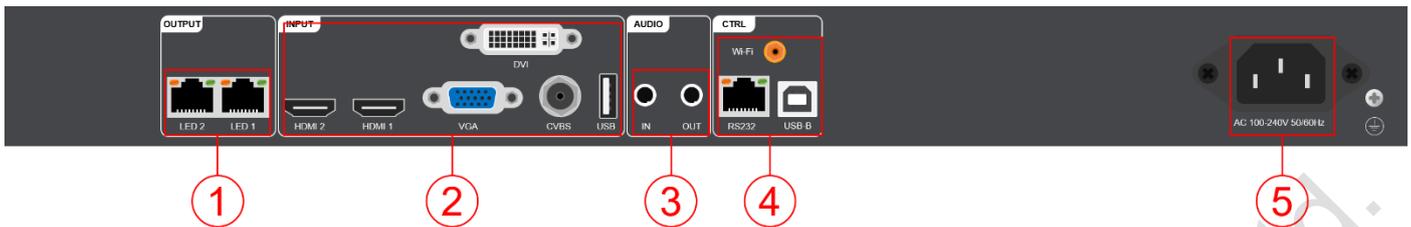
- Support infrared remote control (optional).

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4. Appearance Description

Front panel：

Key Description		
No.	Button	Description
1	Power switch	Controls AC power inpu
2	LCD display	Debugging displays menus, screen parameters and other information
3	IR	Receive infrared remote control
4	MENU	Press the knob to enter submenu or confirm selection Rotate the knob to select menu items or adjust parameters
5	ESC	Escape key/return key
6	SCALE	Partial/full screen switch button
	HDMI1	Select HDMI signal to play/play the previous U disk program
	HDMI2	Select HDMI signal to play/play the next U disk program
	DVI	Select DVI signal playback/U disk program playback and pause
	VGA/CVBS	Select VGA/CVBS signal playback
	USB	Select to play U disk program/stop playing U disk program
	FREEZE	Freeze with one click

Rear panel：

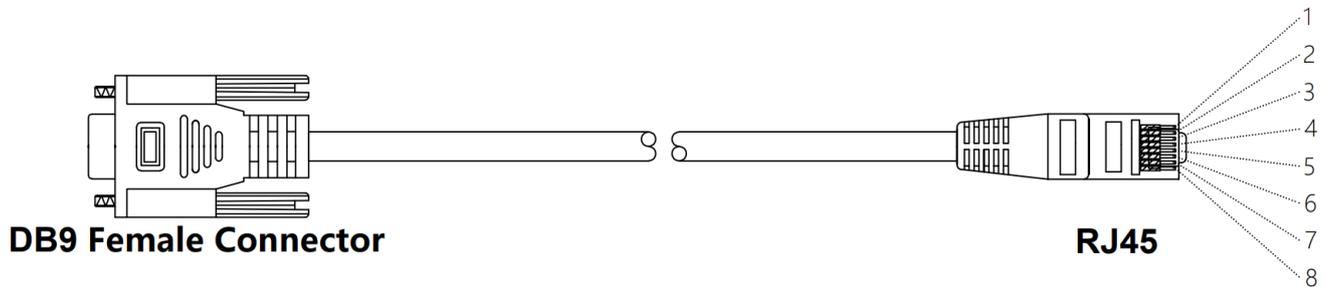| Input interface			
No.	Interface name	Quantity	Description
2	USB	1	USB2.0 input interface U disk can be inserted to play videos and pictures Video file formats: mp4, avi, mpg, mkv, mov, vob and rmvb; Video encoding: MPEG4 (MP4), MPEG_SD/HD, H.264 (AVI, MKV), FLV; Image file formats: jpg, jpeg, png and bmp Video resolution: maximum support 1920×1080@30Hz
	HDMI	2	HDMI input interface Interface form: HDMI-A Signal standard: HDMI1.4 backward compatible Resolution: VESA standard, ≤1920×1080p@60Hz Support audio input
	CVBS	1	CVBS input interface Interface form: BNC Signal standard: PAL/NTSC 1Vpp±3db (0.7V Video+0.3v Sync) 75 ohm Resolution: 480i, 576i
	DVI	1	DVI input interface Interface form: DVI-I socket Signal standard: DVI1.0 backward compatible Resolution: VESA standard, 1080p
	VGA	1	VGA input interface Interface form: DB15 socket

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			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, ≤1920×1080p@60Hz
3	AUDIO IN	1	TRS 3.5mm two-channel audio input interface
5	Power supply	1	AC 100~240V, 50/60Hz

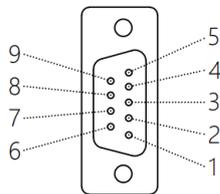| Output Interface			
No.	Interface name	Quantity	Description
1	Gigabit network port	2	Used to cascade receiving cards to transmit RGB data streams; each network port controls a range of 650,000 pixels. Support docking multi-function card
3	AUDIO OUT	1	TRS 3.5mm two-channel audio output interface Connect to audio power amplifier for high-power audio external amplifier

Control interface			
No.	Interface name	Quantity	Description
4	USB-B	1	Connect to computer for debugging equipment
	Wi-Fi	1	Connect Wi-Fi antenna to enhance Wi-Fi signal
	RJ45	1	RJ45 interface, connected to central control equipment

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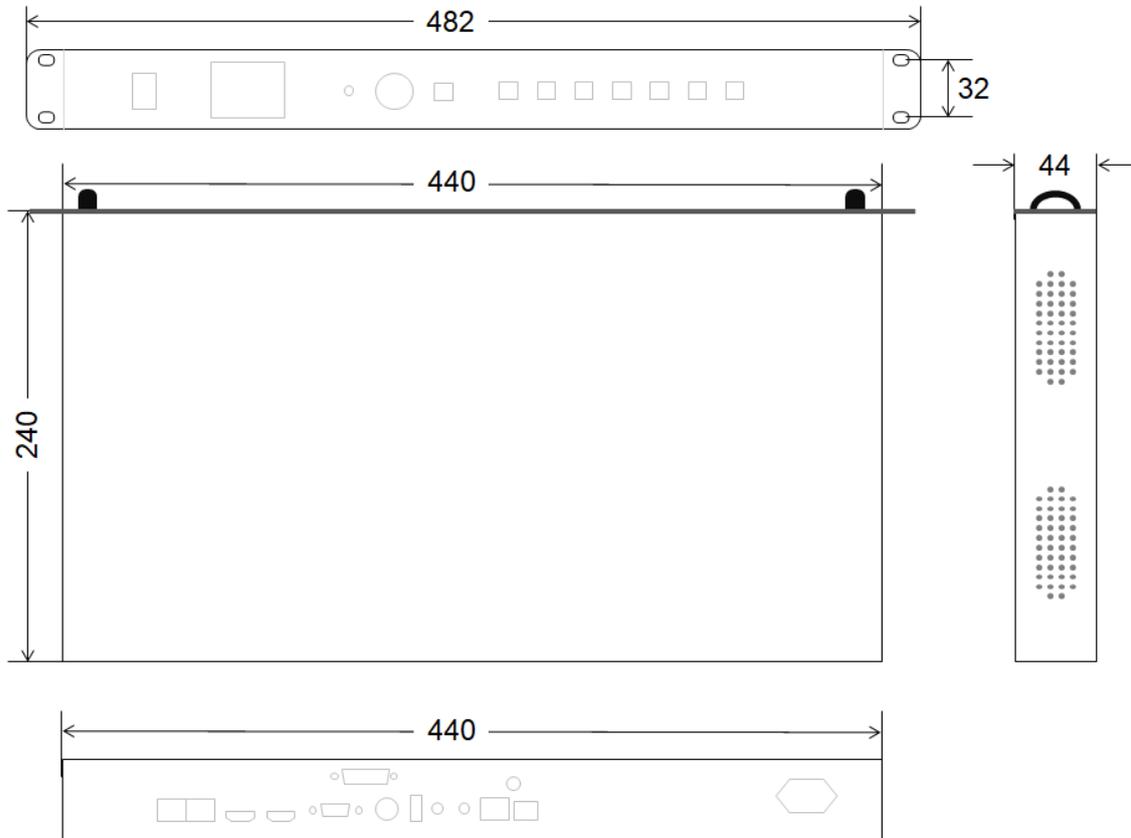
DB9 Female Connector

RJ45

1
2
3
4
5
6
7
8

9 5
8 4
7 3
6 2
   1

Line Ordering:

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

* The schematic diagram of the remote control is as follows. It is optional. If you need it, please contact Grayscale sales or technical support in advance.

	Remote	
Screen freeze	FREEZE / BLACK	Screen black
Brightness up/ Play the previous program on the USB drive	BRI+ ◄◄	
WIN 1 / USB drive program pause and play	WIN1 ►ll / WIN3 SCALE / WIN2 ■	WIN 2 / USB drive program stop and play
Brightness down / Play next program on the USB drive	BRI- ►►l	WIN 3 / part screen and full screen switching / USB drive program loop
Select HDMI 1 signal	HDMI1 / HDMI2	Select HDMI 2 signal
Select DVI signal / Switching video and image on the USB drive	DVI	
Select DP 1 / USB signal	DP1 USB / DP2 VGA	Select DP 2 / VGA / (SDI) signal

5. Product Size

6. Basic Parameters

Parameter item		Parameter value
Chassis specifications		1U standard
Electrical Specifications	Power supply	AC 100~240V 50/60Hz
	Power consumption	14W
Working environment	Working temperature (℃)	-20℃~55℃
	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

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Specifications	Net weight	2.6KG
Packing specifications	Packing size	W×H×D/515mm×82mm×355mm
	Packing weight	2.7KG

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.

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