



灰度科技  
HUIDU TECHNOLOGY

# Instruction Manual

Three-in-one processor  
**HD-VP210H**

V1.0 20240703

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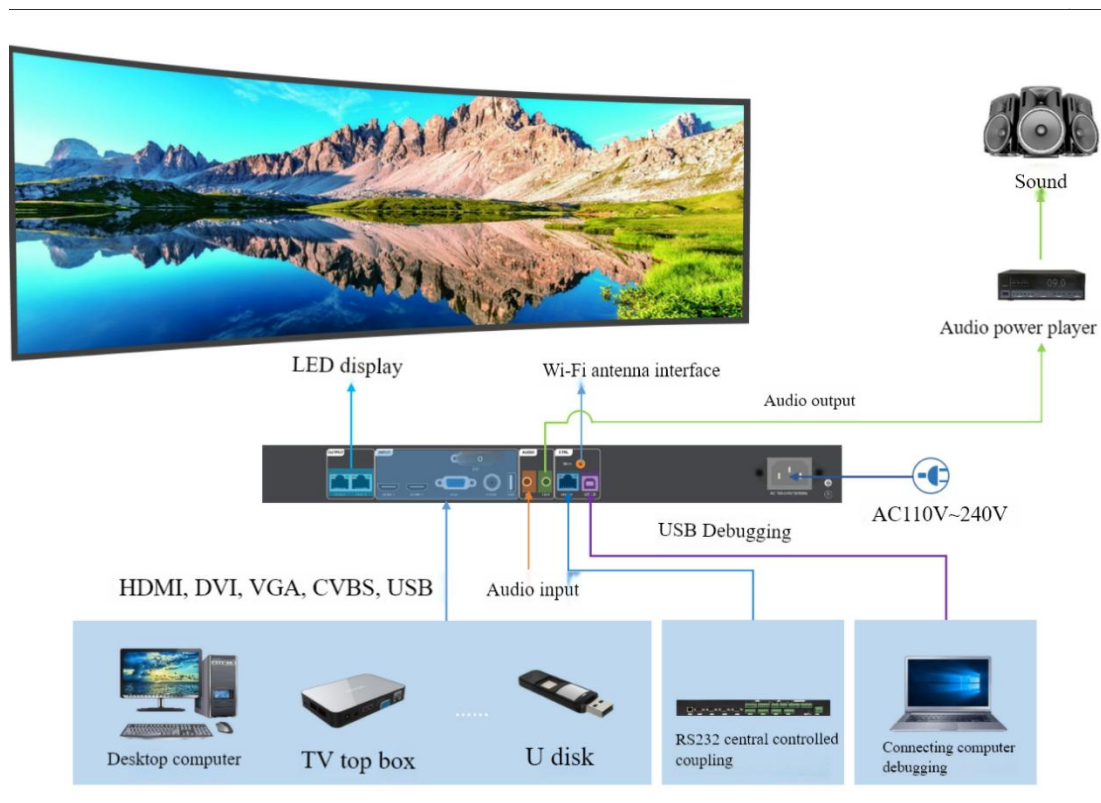
## 1 Introduction

HD-VP210H is a powerful 3-in-1 controller integrating single-screen video processing and sending card functions .

Features:

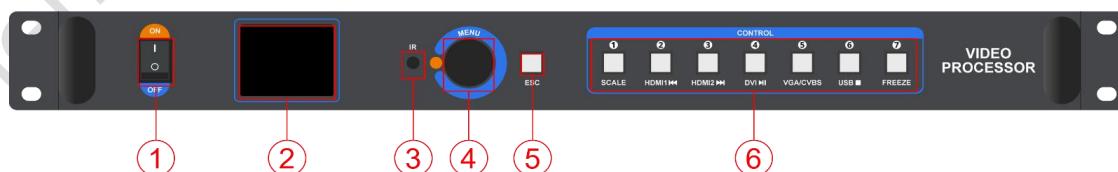
- 1) Load range: 1.3 million pixels , maximum width 3840 , maximum 2500 ;
- 2) Seamless switching of any channel;
- 3 ) Other channel video input, USB playback video and picture files;
- 4 ) 2 HDMI audio inputs, 1 audio output, 1 audio output;
- 5 ) Integrated sending card function, 2 Gigabit Ethernet output ports.
- 6 ) Scene preset saving and calling, support saving 16 user templates;
- 7 ) Wi -Fi is standard and supports APP wireless control.
- 8) Effective conversion is complete, and the background color is automatically removed under limited input conditions.

## 2 Application scenarios



## 3 Appearance

### Front Panel

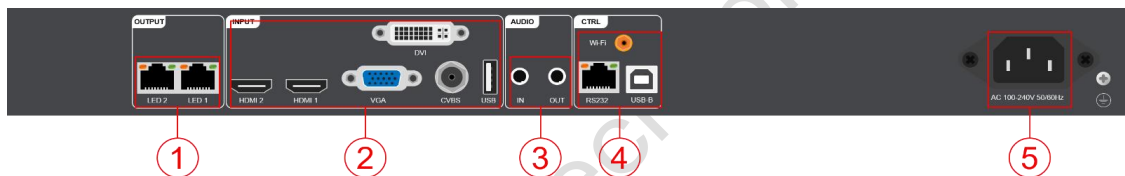


### Key Description

| Serial number | button      | illustrate  |
|---------------|-------------|---|
| 1             | switch      | Control AC power input  |
| 2             | LCD Display | Debugging display menu, screen parameters and other information   |
| 3             | IR          | Receive infrared remote control   |
| 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 | SCALE      | Partial/full screen switch button                                 |
|   | HDMI 1     | Select HDMI signal to play/ play the last USB program             |
|   | HDMI 2     | Select HDMI signal to play/ play the next USB program             |
|   | DVI        | Select DVI signal playback/U disk program playback and pause      |
|   | VGA / CVBS | Select VGA / CVBS signal playback                                 |
|   | USB        | Select to play the U disk program/stop playing the U disk program |
|   | FREEZE     | One-click freezing  |

## Rear Panel



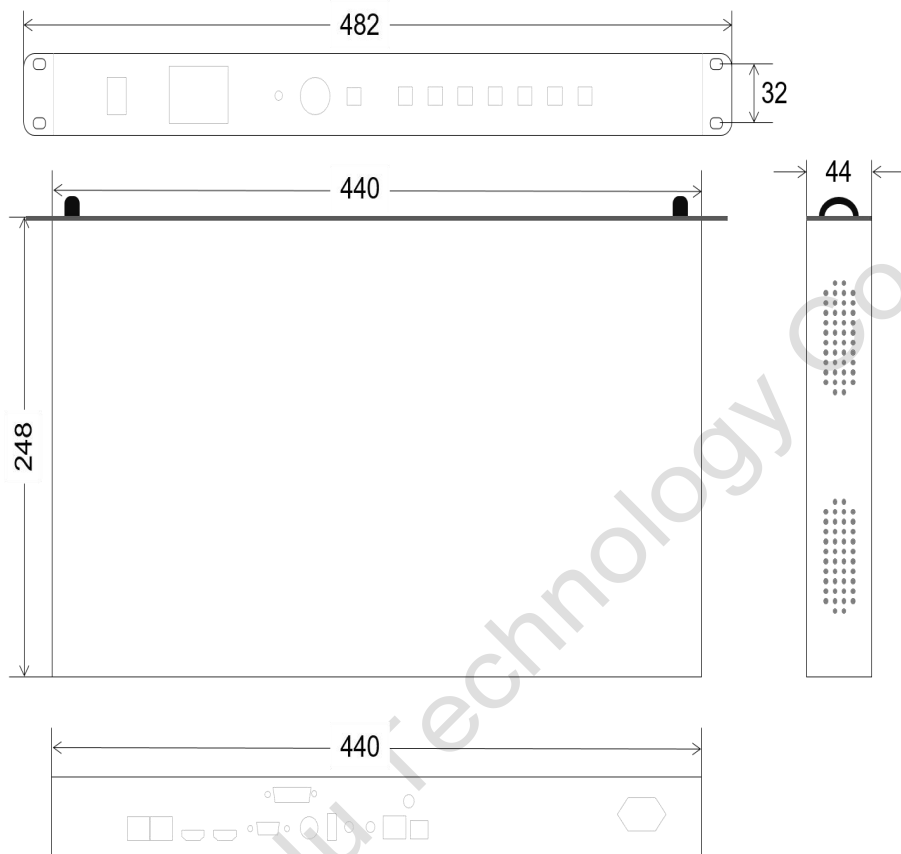
| input interface |                |          |  |
|-----------------|----------------|----------|--|
| Serial number   | Interface Name | quantity | illustrate   |
| 2               | USB            | 1        | <p>USB2.0 input interface</p> <p>Can insert U disk to play videos and pictures</p> <p>Video file formats: mp4, avi, mpg, mkv, mov, vob and rmvb ;</p> <p>Video encoding: MPEG4(MP4), MPEG_SD/HD, H.264(AVI, MKV), FLV;</p> <p>Image file formats: jpg, jpeg, png and bmp</p> <p>Video resolution: Maximum support 1920×1080@30Hz</p> |
|                 | HDMI           | 2        | <p>HDMI input interface</p> <p>Interface type: HDMI-A</p> <p>Signal standard: HDMI1.4 backward compatible</p> <p>Resolution: VESA standard, ≤1920×1080p@60Hz</p> <p>Support audio input</p>  |
|                 | CVBS           | 1        | <p>CVBS input interface</p> <p>Interface type: BNC</p> <p>Signal standard: PAL/NTSC 1Vpp±3db (0.7V Video+0.3v Sync) 75 ohm</p> <p>Resolution: 480i, 576i</p>   |
|                 | DVI            | 1        | <p>DVI input interface</p> <p>Interface form: DVI-I socket</p> <p>Signal standard: DVI1.0 backward compatible</p> <p>Resolution: VESA standard, 1080p</p>  |
|                 | VGA            | 1        | VGA input interface  |

|   |              |   |  |
|---|--------------|---|--|
|   |              |   | Interface form: DB15 socket<br>Signal standard: R, G, B, Hsync, Vsync: 0 to 1Vpp±3dB (0.7V Video+0.3V Sync)<br>75 ohm black level: 300mV Sync-tip: 0V<br>Resolution: VESA standard, ≤1920×1080p@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 | 2        | Used to cascade receiving cards to transmit RGB data streams; each network port controls 650,000 pixels.<br>Support docking multi-function card |
| 3                | 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   |
| 4                 | USB-B          | 1        | Connect to a computer for debugging the device           |
|                   | Wi-Fi          | 1        | Connect a Wi-Fi antenna to enhance Wi-Fi signal          |
|                   | R S232         | 1        | R J45 interface, connected to the central control device |

## 4 Dimensions



## 5 Product Use

### 5.1 Operation steps

- step 1 Connect the display power supply to power on the screen
- Step 2 Connect a playable input source to the HD-VP210H
- Step 3 Use USB-B serial cable to connect to computer to debug screen parameters (refer to HDset user manual)

### 5.2 Input source switching

HD -VP210H supports connecting to 6 signal sources at the same time, and can switch to the input source you need to play at any time according to your needs.

Switch input source

There are four ways to switch input sources. One is to directly press the input source button on the front panel for quick switching, one is to select and switch the input source through the software HDS et , and one is to select and switch the input source through the remote control (remote control optional) , AP switching .

### 5.3 Zoom settings

HD -VP210H supports full screen zoom and point-to-point zoom modes

#### Full Screen Zoom

The system adaptively scales the current input resolution to full-screen display according to the screen resolution in the display configuration.

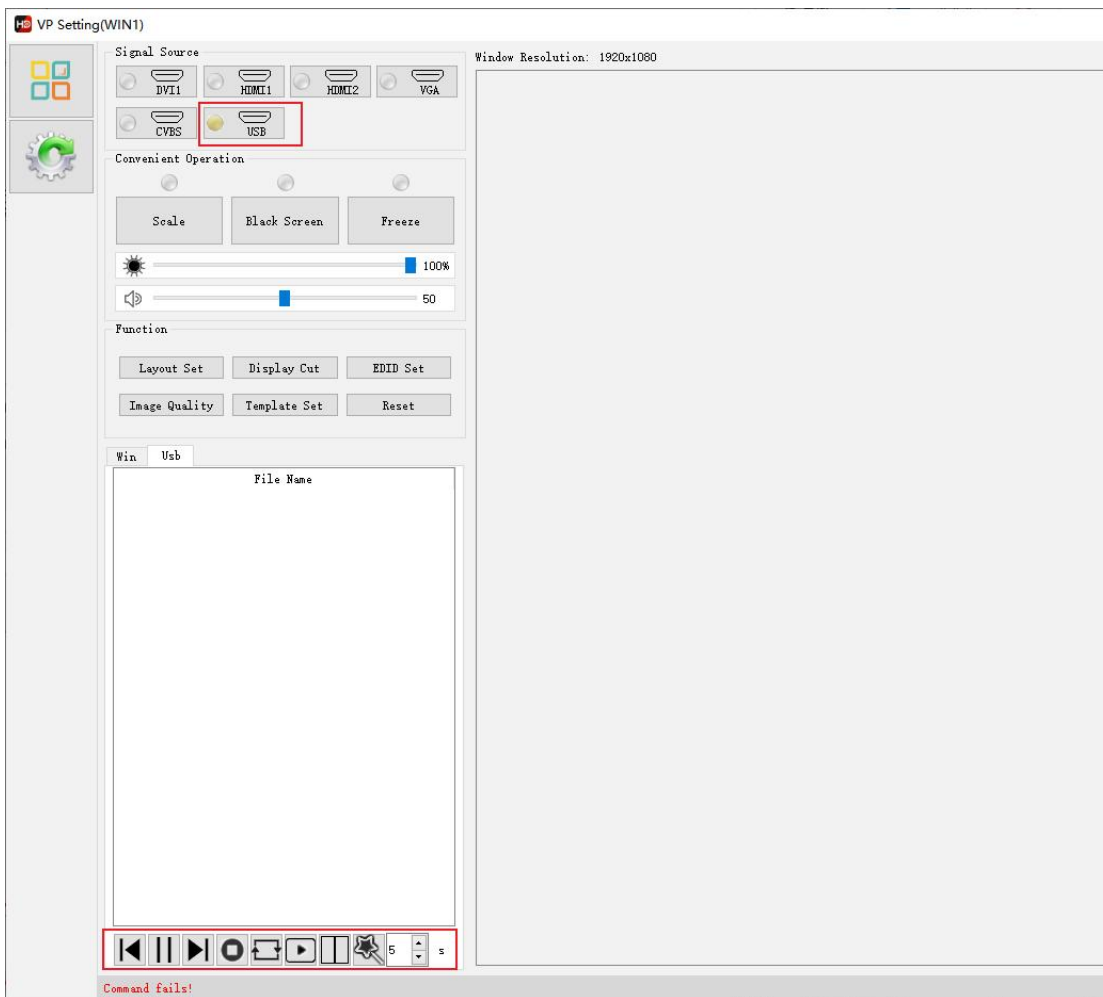
peer to peer









Point-to-point display, without scaling, press the SCALE button, the SCALE button indicator lights up and the display is point-to-point.

### 5.4 USB playback

H D-VP21 0 H supports playing pictures or video files stored in USB flash drives.

When the media type is "Picture", it also supports turning on and off "Picture Effects" and setting the picture switching interval. The front panel can manually set the U disk playback content. The software operation is as shown below



-  Play the previous file of the current file;
-  Play or Pause;
-  Play the next file of the current file;
-  Stop play;
-  Play mode switch;
-  Switch the playback file category;
-  Display mode switching;
-  Special effects turned on.

## Playback Controls




USB " in the input source area of the front panel to switch to the USB input source, press the USB button again to enter the USB playback control , after enabling the USB playback control, the HDMI 1 and HDMI 2 button lights are on, and the corresponding multiplexing function of the button is enabled. Press USB again to exit the playback control.

**BRIGHT+**  Play the previous file of the current file;

**HDM2** Stop play;

**SCALE**  Play mode switch (sequential play or single file loop);

**FREEZE**  Switch the playback file category.

## 5.5 Button lock

**ESC + FREEZE Press** HDMI1, FREEZE for 3S at the same time to turn on the key lock function. The HDMI1, HDMI2, and USB lights will all light up, and the lights of non-current input sources will flash. When in the key lock state, press HDMI1, FREEZE for 3S again at the same time to release the key lock.

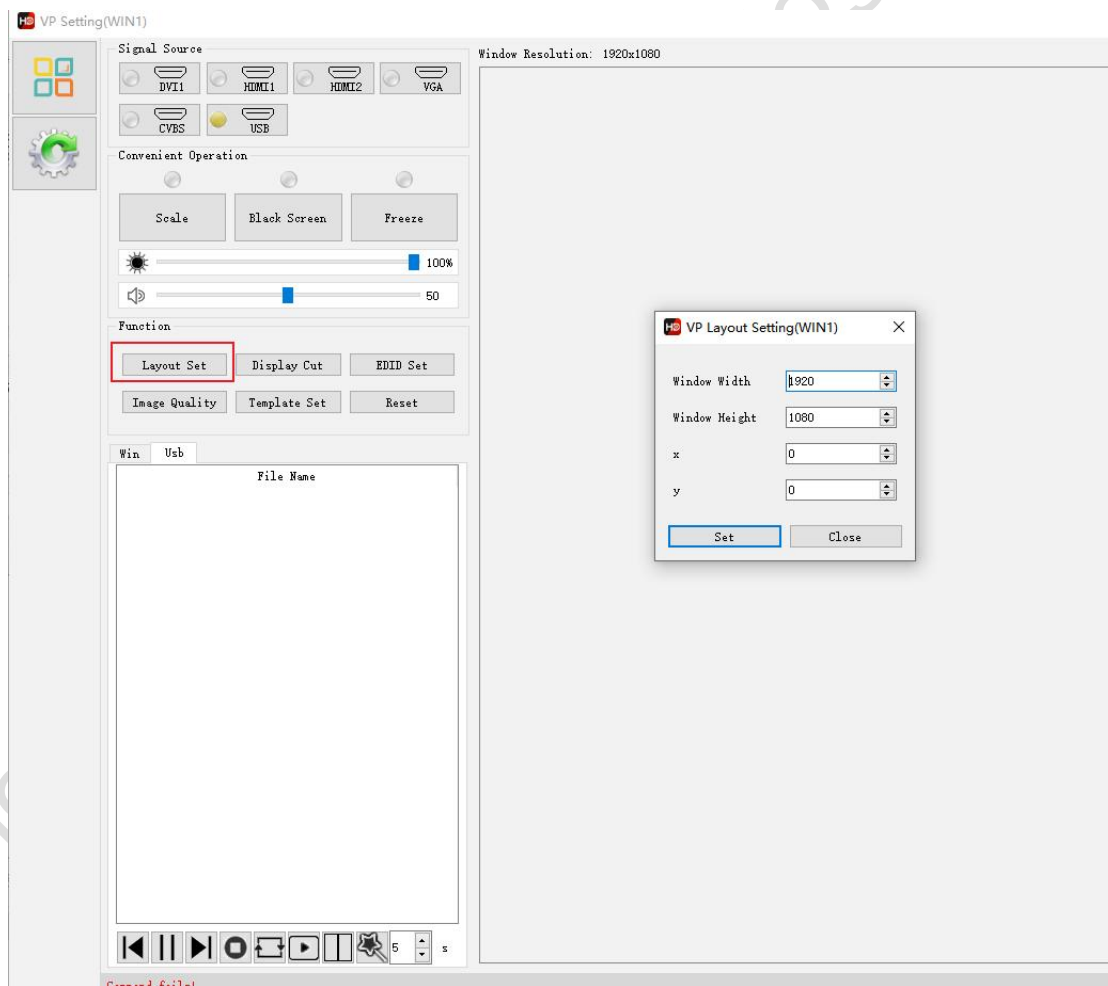
## 5.6 Button indicator light description

- 1) When the power is turned on (i.e. when the device is started), the indicator lights cycle from left to right - a marquee;
- 2) The indicator light of the currently selected input source with signal input is always on, and the indicator light of the currently selected signal source without signal flashes;
- 3) When the key lock is enabled, the indicator light of the current input source is always on, and the indicators of other input sources flash;
- 4) In USB playback, quick operation mode, the HDMI1 and HDMI2 USB indicators are always on;
- 5) In upgrade mode, the HDMI2 and USB FREEZE indicators flash;

- 6) In the debt collection mode, all indicator lights are always on when the payment is due;
- 7) In point-to-point mode (local mode), the SCALE indicator light is always on;
- 8) In freeze mode, the FREEZE indicator light is always on

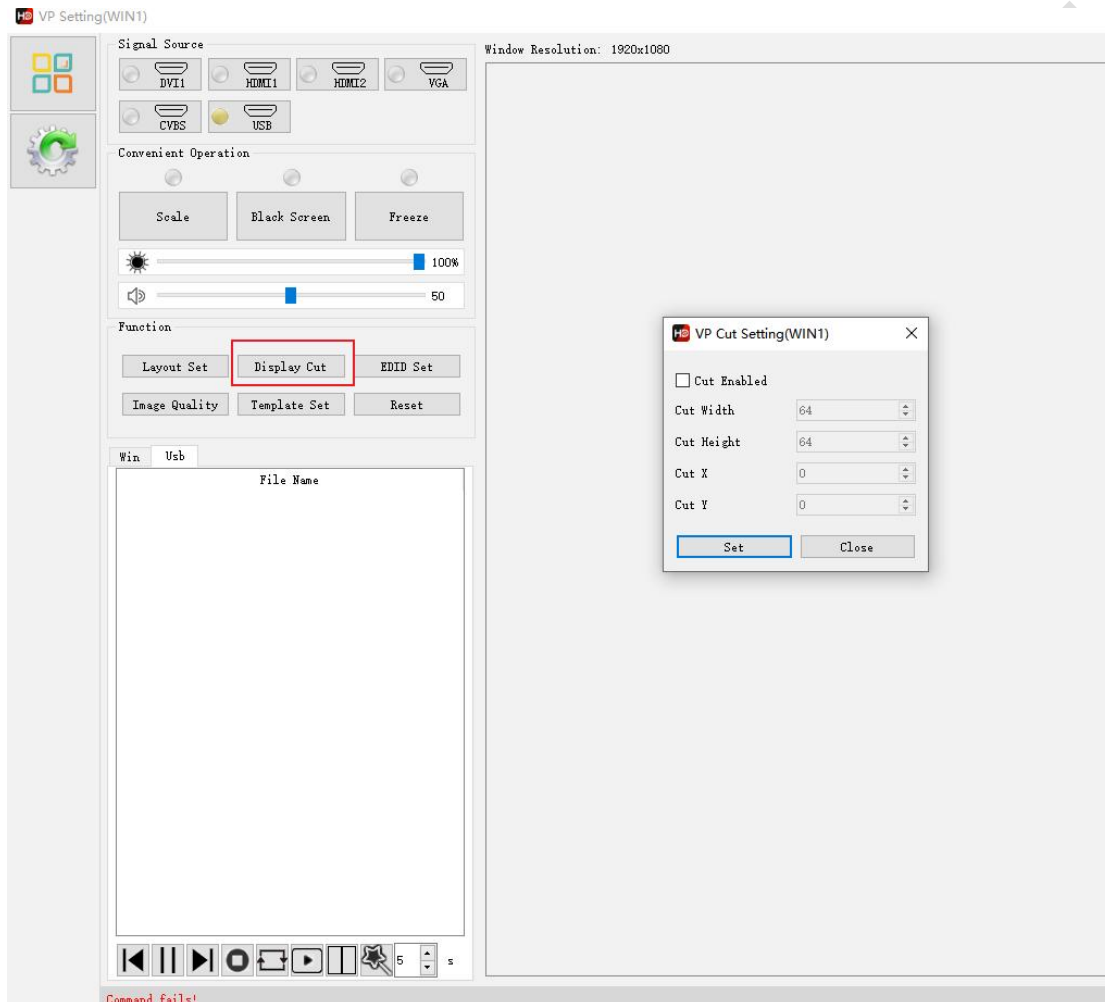
## 5.7 Screen layout

HD -VP210H supports users to manually adjust the image size and position, as shown below



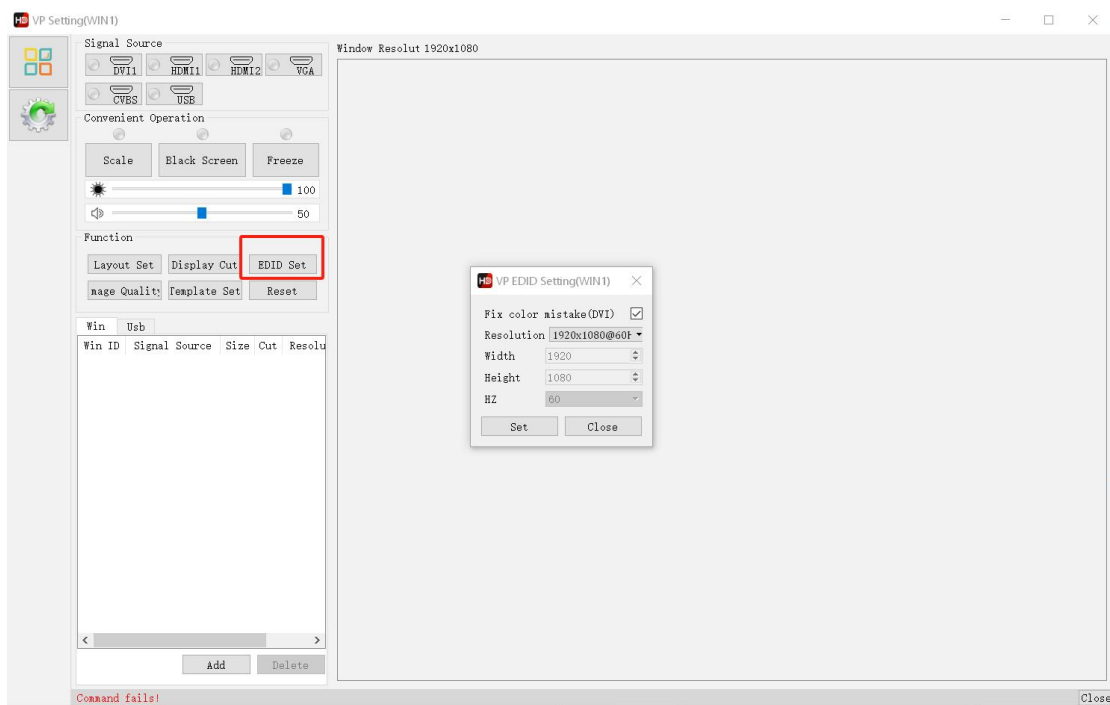
## 5.8 Interception

HD-VP210H supports users to manually intercept input signals, as shown below



## 5.9 EDID settings

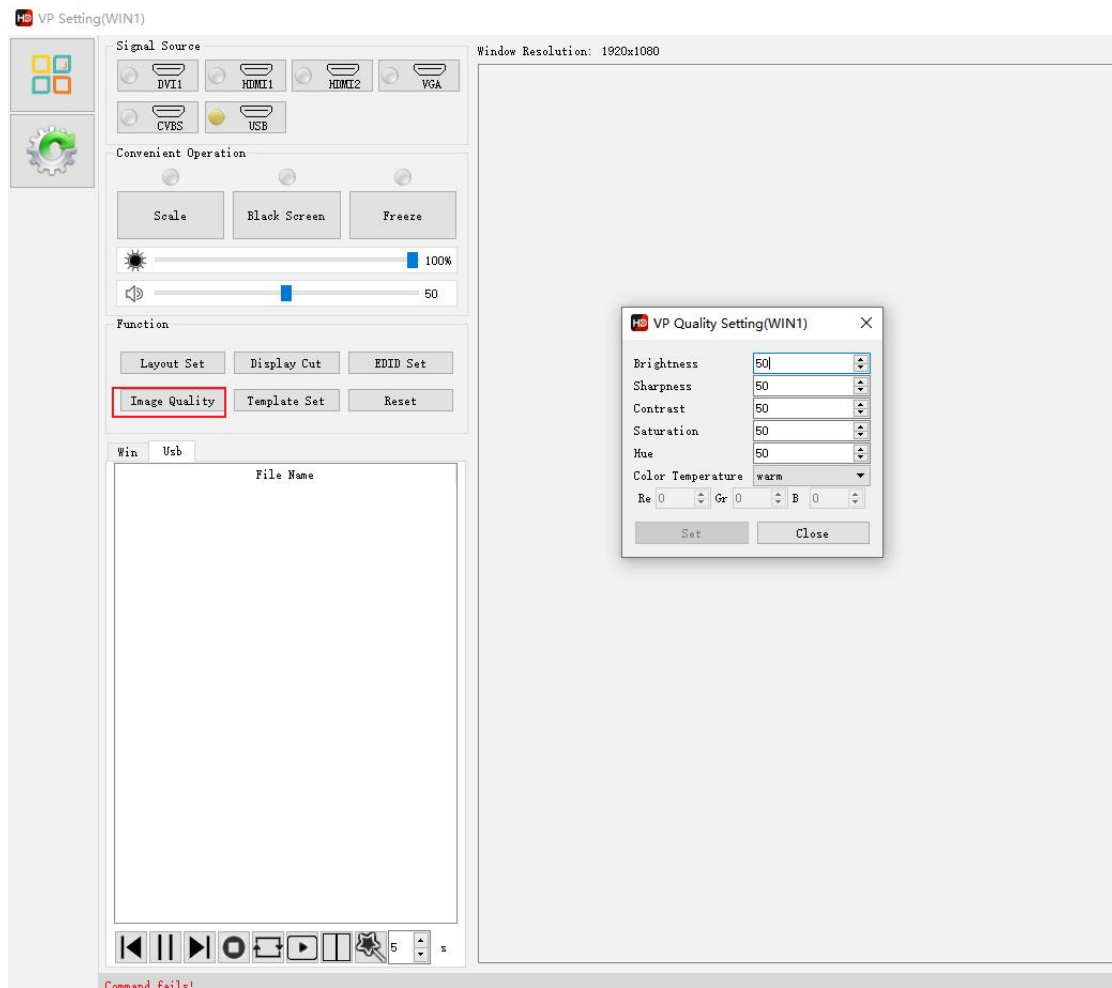
Modify the input resolution, you can customize the input resolution; HDMI input , if the display is green, check the HDMI correction color cast, and the setting is successful. As shown below



## 5. 10 Image quality adjustment

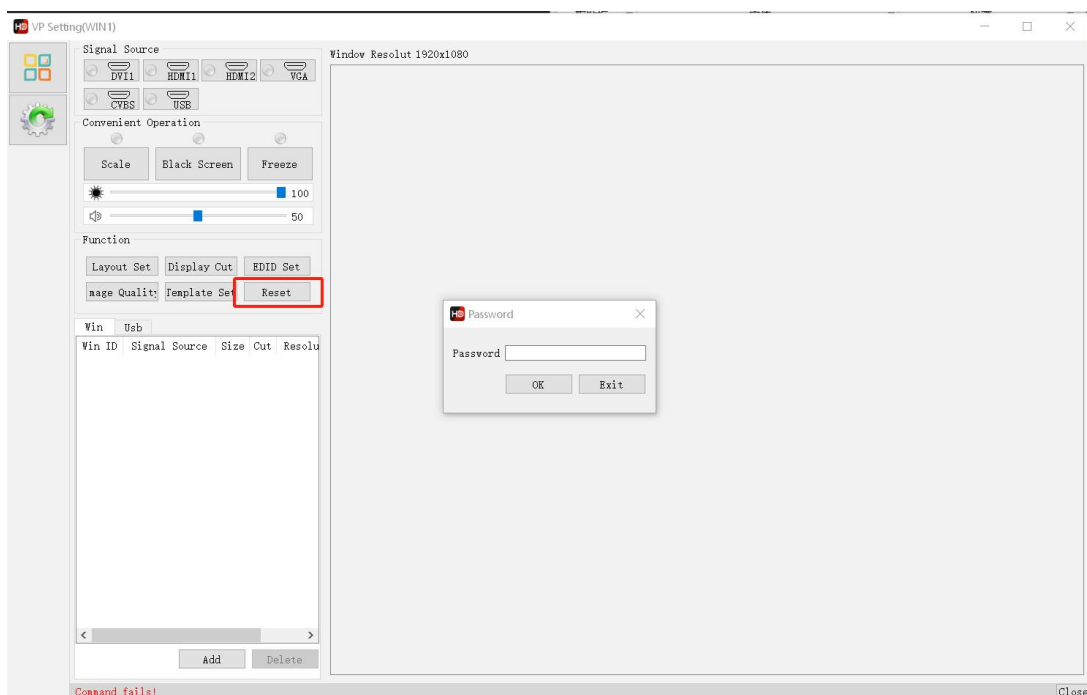
HD-VP210H supports users to manually adjust the image quality of the output image, making the large-screen display more delicate and bright, and improving the display effect. When adjusting the image quality, you need to observe and adjust it at the same time, and there is no specific reference value.

This type of operation requires settings on the software HDS et , as shown in the figure below . (You can also enter this setting by manually setting the processor front panel)

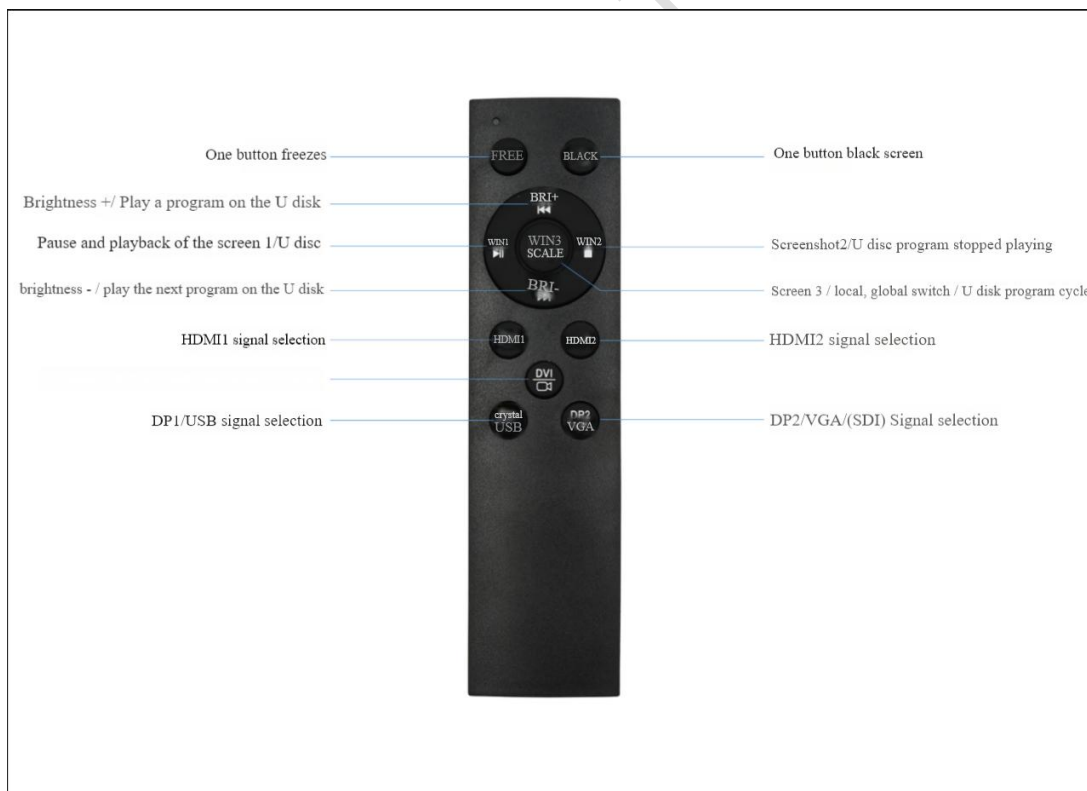


## 5.11 Factory Reset

HD-VP210H supports users to factory reset the device, password 168 , as shown below



## 5.12 Remote Control (Optional) Description



### other instructions:

1. Welcome to choose Huidu Technology products. There may be slight differences between the

product pictures in the specification and the actual appearance. If you have any questions, please contact technical support or salesperson for confirmation.