灰度科技
HUIDU TECHNOLOGY

User Manual

HD-VP620

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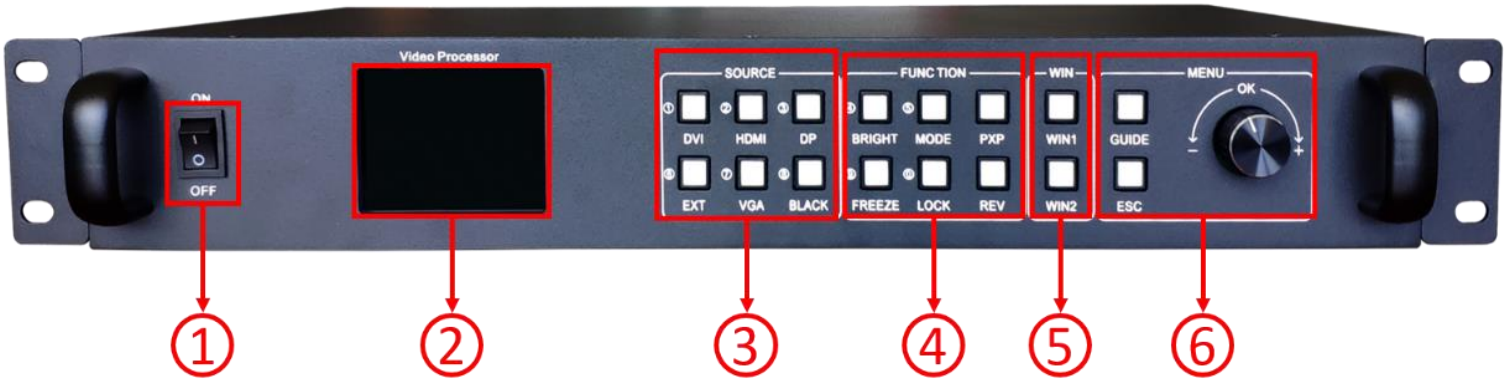
Chapter 1 Interface connection

1.1 Front panel



No.	Button	Function Description
1	Power Button	Device power switch button
2	LCD screen	Display device menu information

3	Input Source Select keypad	6 buttons [DVI] ~ [DP], 5 input source port selection buttons, corresponding to the input interface identification on the back panel. Among them: when you press BLACK and the BALCK LED indicator is on, the output is in a black screen state.
4	Function setting keypad	[BRIGHT]: Quickly swap out the shortcut keys of the brightness adjustment menu. [FREEZE]: Shortcut key for screen freeze. [MODE]: Quickly pop up the preset mode call menu. [LOCK]: Quickly lock the keys to prevent miss operation. [PXP]: Quickly enter the dual picture layout menu. [REV]: reserved function keys.
5	Window selection button	[WIN1]- [WIN2]Button: You can select the opened screen 1~2 window, and the LED light indicates the currently selected window.

6	Menu Area	Short press the knob [OK] key: it means to enter the main menu or input confirmation. Turn the knob clockwise to increase or the next option, counterclockwise to decrease or the previous option. [GUIDE] key: can quickly switch out the "smart navigation" setting interface. Return key [ESC]: means to exit the current operation or option.

1.2 Rear Panel

Output		
Output Port	**Quantity**	**Function**
MONITOR	1	Synchronous monitoring of HDMI output interface, external LCD display.
LED Network port	6	LED1-LED6: 6-way network port output interface，Connect to the LED screen receiving card,total pixels 5.2 million，Widest 8000 dots, Highest 3840dots.
Input		
Input Port	**Quantity**	**Function**
EXT	1	Expansion input port, the default is DVI, HDMI or SDI can be selected

DVI	1	Interface form: DVI-I socket Signal standard: DVI1.0 Resolution: VESA standard, PC to 1920x1080, HD to 1080p
HDMI	1	Interface form: HDMI-A Signal standard: HDMI2.0 backward compatible Resolution: VESA standard,≤3840×2160@60Hz
DP	1	Interface form ： DP Signal standard:DP1.2backward compatible Resolution: VESA standard,≤3840×2160@60Hz
VGA	1	Interface form: DB15 socket Signal standard: R, G, B, Hsync, Vsync: 0 to 1Vpp ± 3dB (0.7V Video + 0.3v Sync)

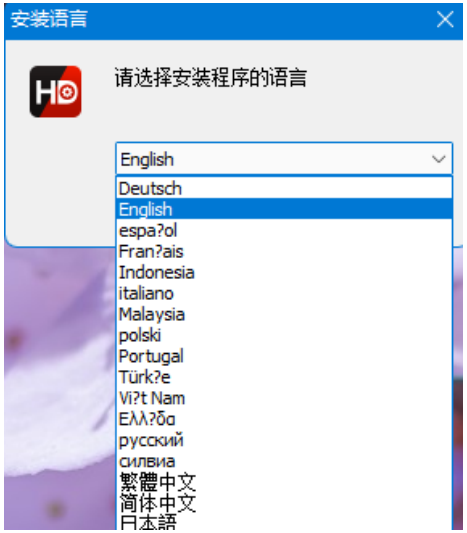
		75 ohm black level: 300mV Sync-tip: 0V Resolution: VESA standard,≤1920×1080p@60Hz
AUDIO Port	**Quantity**	**Function**
IN	1	Input x1， 3.5mm audio port
OUT	1	Output x1， 3.5mm audio port
Control interface		
Port	**Quantity**	**Function**
Square USB（Type B）	1	Connect to the PC, debug the parameters of the sending card and receiving card, and program upgrades through HDSet software.
WIFI	1	WIFI Wireless control
Power		
Power interface	1	110-240VAC， 50/60Hz

1.3 Hardware connection

Chapter 2 HDSet installation

Please download the installation package of HDSet software from Huidu's official website www.huidu.cn, and complete the installation according to the diagrams below:

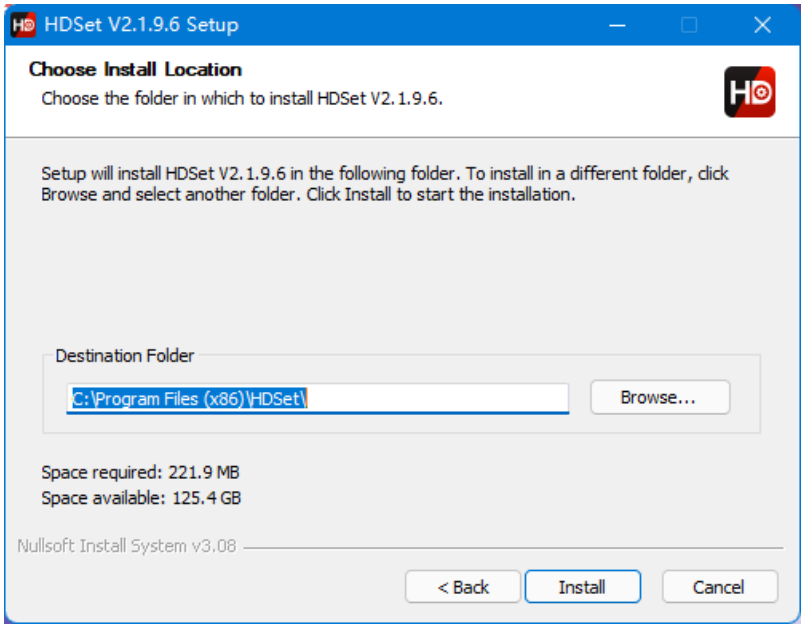
1.Run the software package,then select language for installer. Click [OK] to go on.

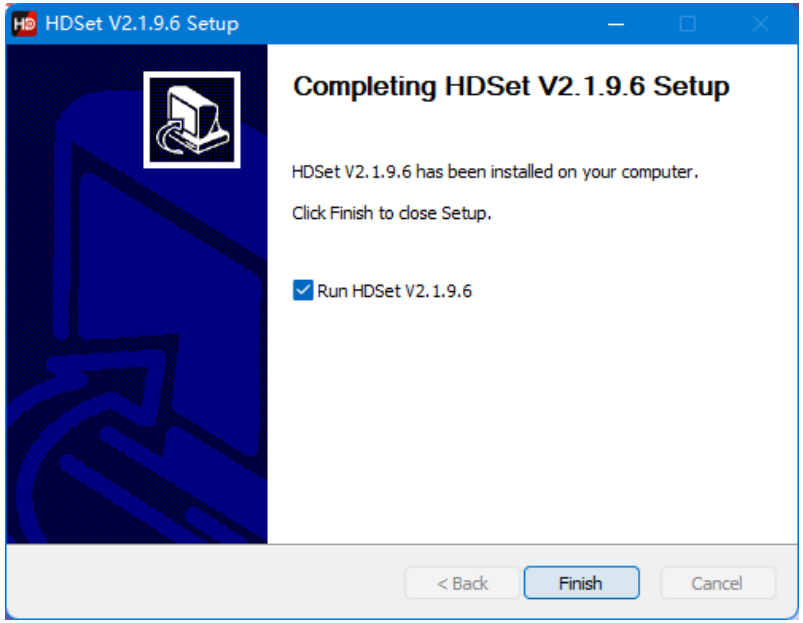


2.After selecting a language, an installation wizard like below will appear.Click [Next].

Choose the installation location, click [Browse] to change the default target location,then click [Install] after completing;

After the installation is complete,you are ready to use HDSet.





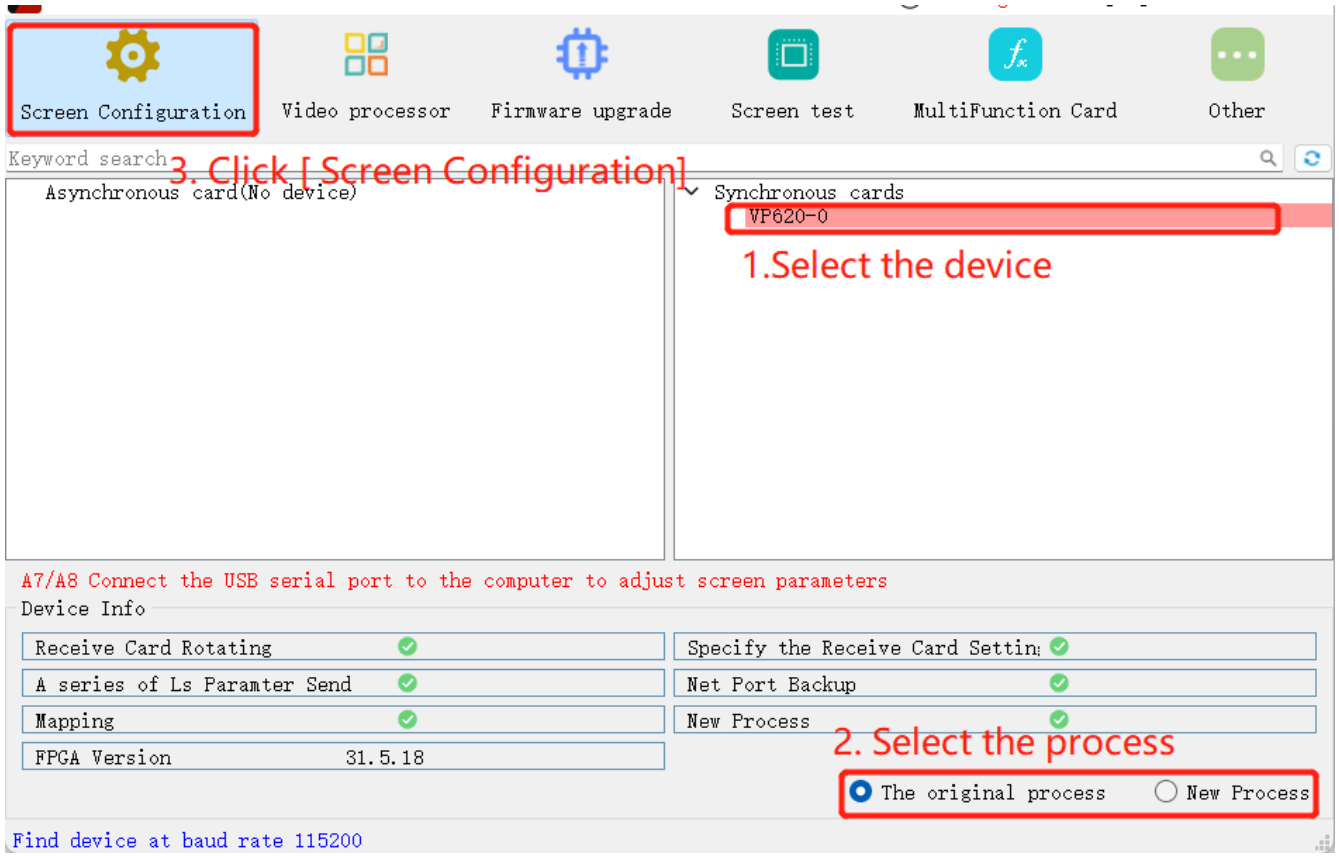
Chapter 3 HD-VP620 Parameter settings

3.1 Connection

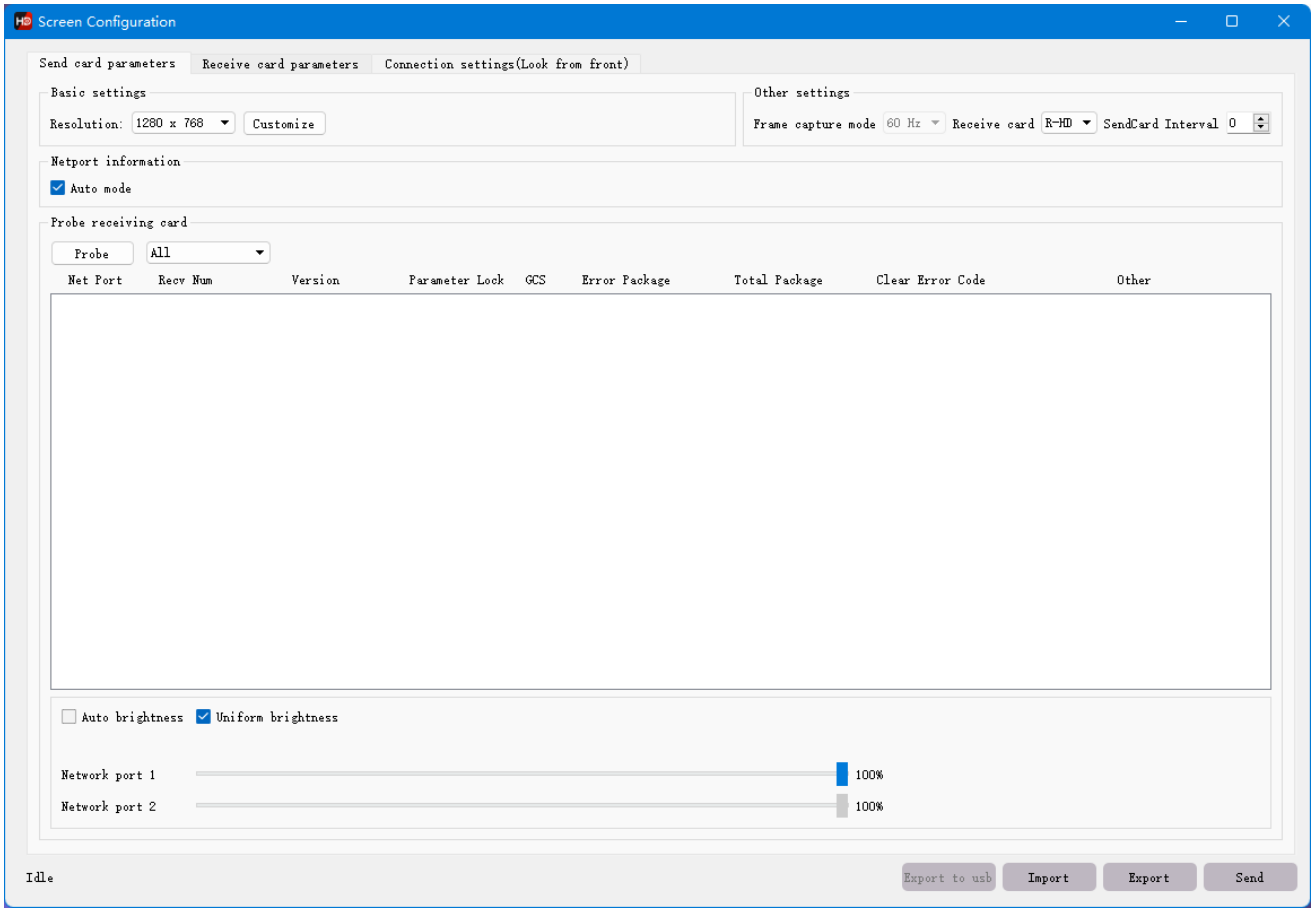
Connect the VP620 to the computer by USB-B type cable.

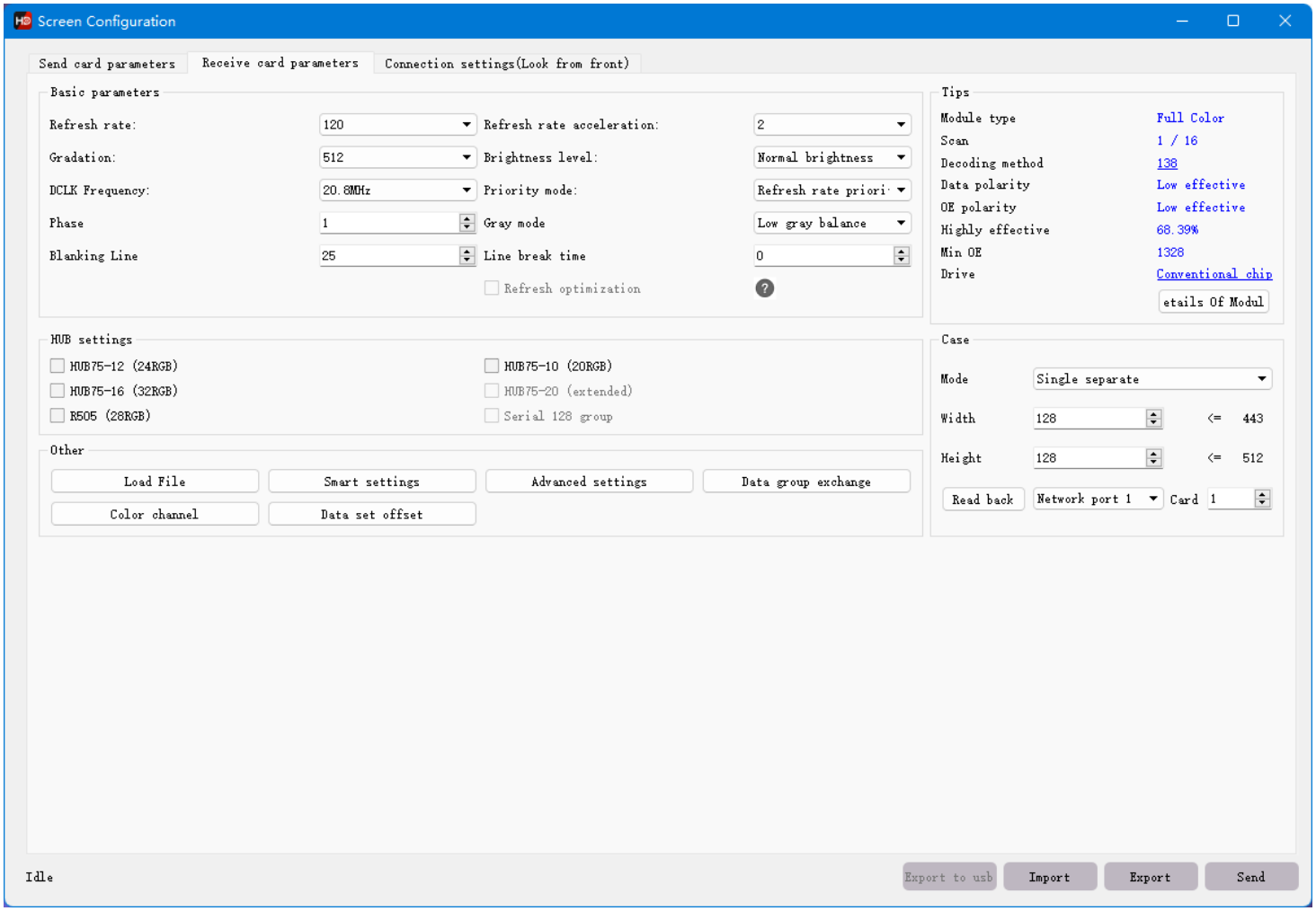
3.2 Screen Configuration

1. Run HDset software,then select device and process, click [Screen Configuration].



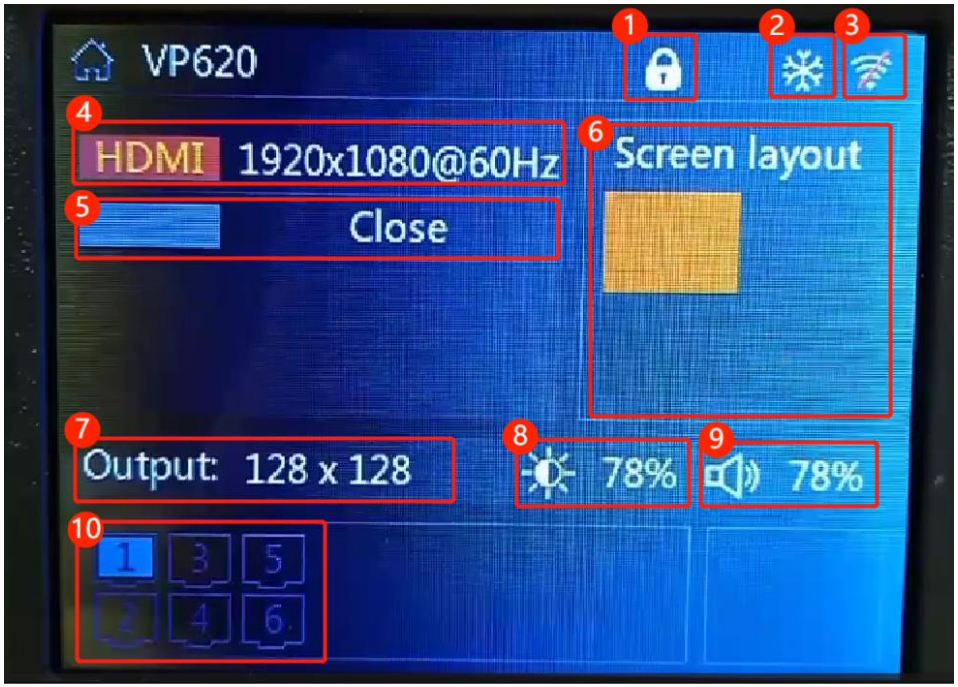
2. you can debug receiving cards.


Screen Configuration
Send card parameters
Receive card parameters
Connection settings(Look from front)
Basic settings
Resolution:
1280 x 768
Customize
Other settings
Frame capture mode
60 Hz
Receive card
R-MD
SendCard Interval
0
Netport information
Auto mode
Probe receiving card
Probe
All
Net Port
Recv Num
Version
Parameter Lock
GCS
Error Package
Total Package
Clear Error Code
Other
Auto brightness
Uniform brightness
Network port 1
100%
Network port 2
100%
Idle
Export to usb
Import
Export
Send


Screen Configuration
Send card parameters
Receive card parameters
Connection settings(Look from front)
Basic parameters
Refresh rate:
120
Refresh rate acceleration:
2
Gradation:
512
Brightness level:
Normal brightness
DCLK Frequency:
20.8MHz
Priority mode:
Refresh rate priori
Phase
1
Gray mode
Low gray balance
Blanking Line
25
Line break time
0
Refresh optimization
Tips
Module type
Full Color
Scan
1 / 16
Decoding method
138
Data polarity
Low effective
OE polarity
Low effective
Highly effective
68.39%
Min OE
1328
Drive
Conventional chip
etails Of Modul
HUB settings
HUB75-12 (24RGB)
HUB75-10 (20RGB)
HUB75-16 (32RGB)
HUB75-20 (extended)
R505 (28RGB)
Serial 128 group
Case
Mode
Single separate
Width
128
<=
443
Height
128
<=
512
Other
Load File
Smart settings
Advanced settings
Data group exchange
Color channel
Data set offset
Read back
Network port 1
Card
1
Idle
Export to usb
Import
Export
Send

Chapter 4 HD-VP620 Product Operation

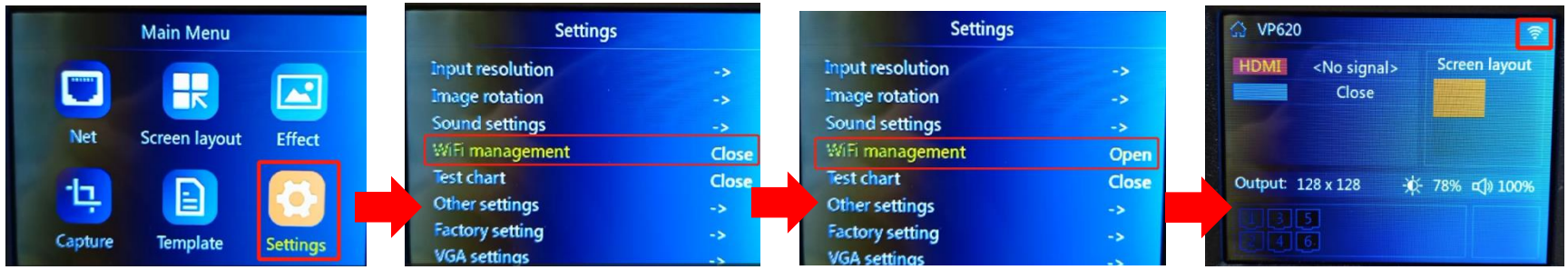
4.1 Interface Description



1. Button lock, Lock the button by pressing "LOCK".

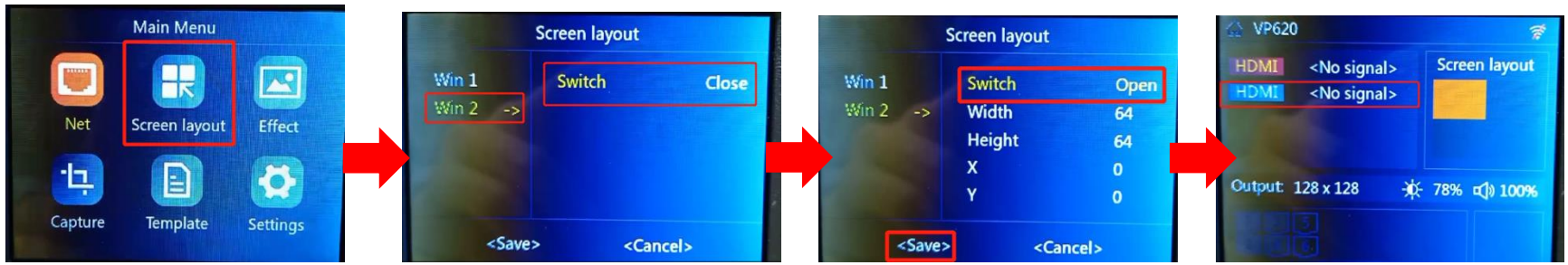
2. Freeze, screen freeze by pressing “FREEZE”.

3. Wi-Fi, you can follow the steps below to turn on and off WiFi.



4. Input source for Win 1， input resolution and refresh rate.

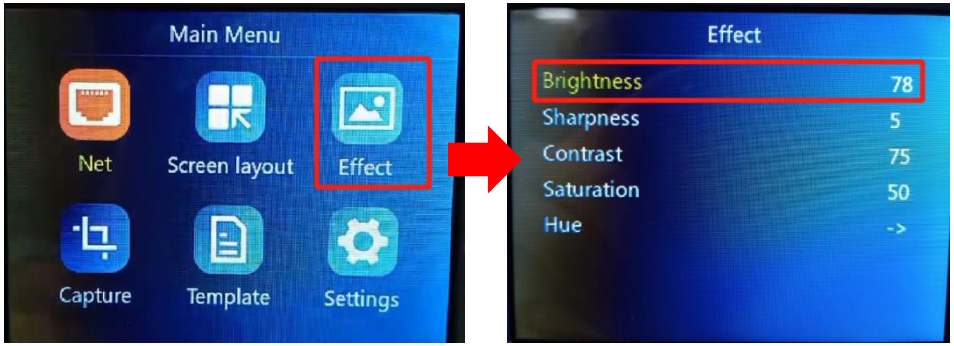
5. Input source for Win 2, you can follow the steps to open Win2.



6. Screen layout, show the screen layout of the current window.

7. Output resolution, output to screen resolution.

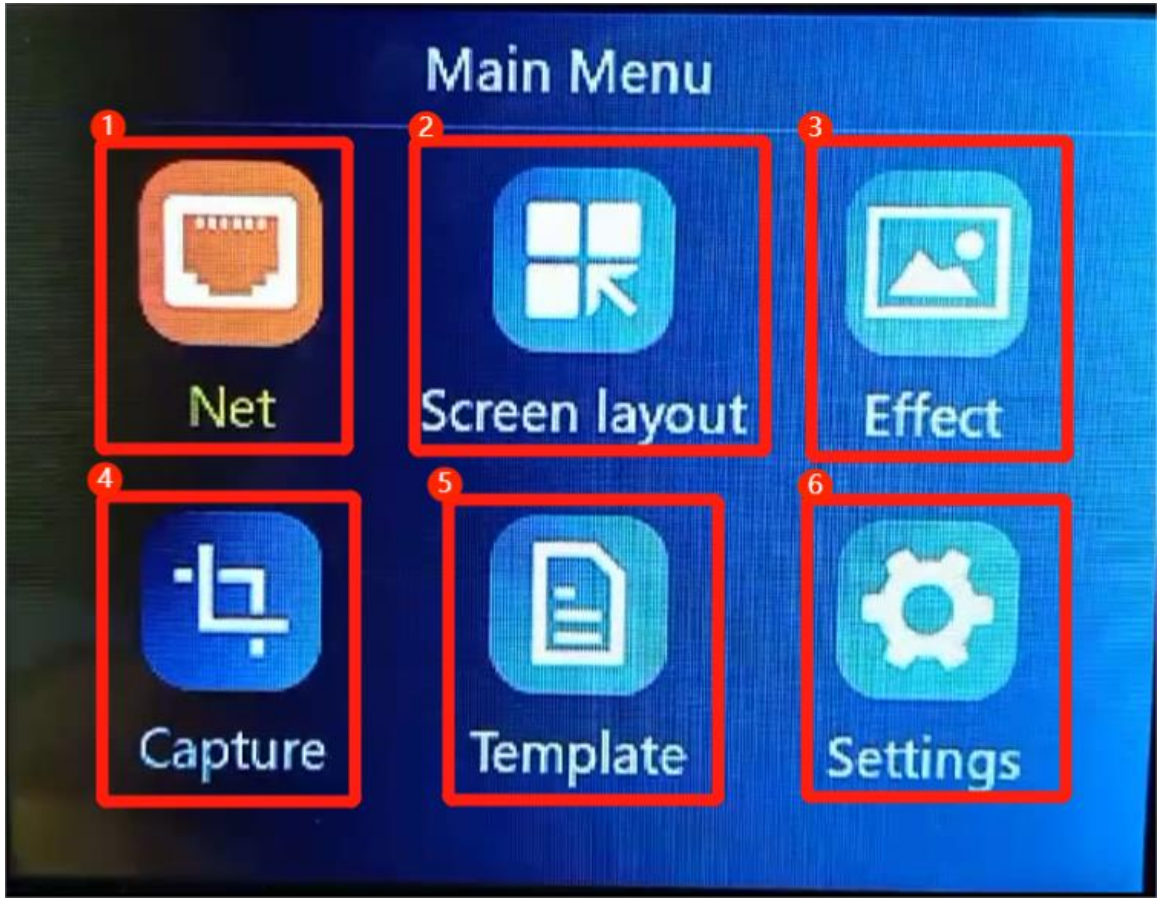
8. Brightness, the screen brightness, you can adjust the brightness by the following steps.



9. Sound, you can adjust the volume by the following steps.

10. LED Network port, display the number of network ports currently in use.

4.2 Navigation interface



1. Output settings are used to set the load range and connection relationship of the sending card network port.

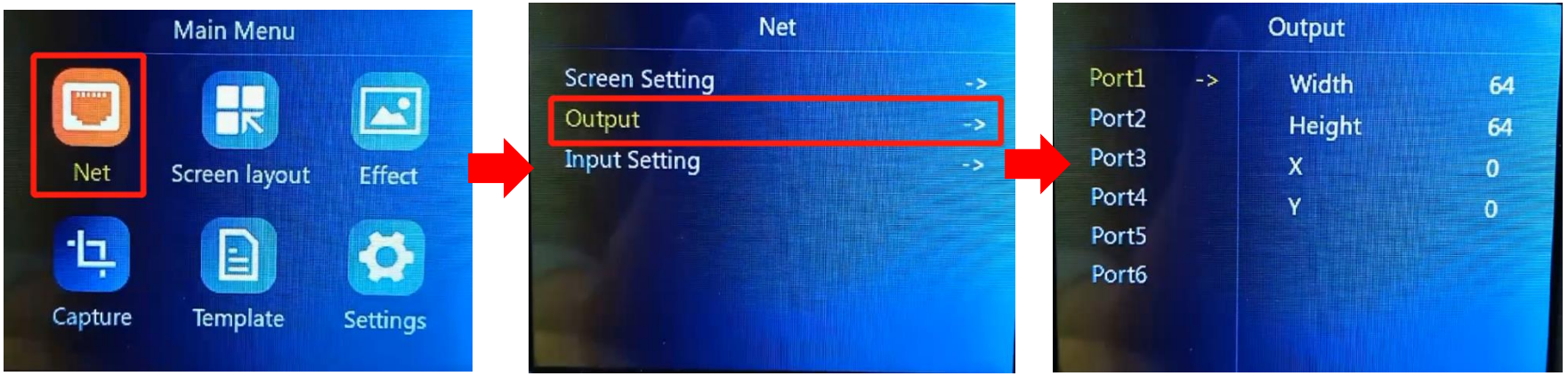
2. The screen layout is used to set the output screen, and supports up to 2 screens to display at the same time.
3. Effects are used to set image sharpness, saturation, color temperature, brightness and other settings.
4. Capture is used to capture the input source of the screen. You can set the screen and coordinates captured after the input source is entered.
5. Save mode to save current parameters forming the template file, to facilitate subsequent quick set.
6. Advanced settings are used to set input source resolution, restore factory settings, display firmware version, and adjust VGA.

4.3 Input source switching

The HD-VP620 supports simultaneous access to five signal sources, and can switch to the input source that needs to be played at any time as required. You can quickly switch by pressing the key in the "SOURCE" area of the front panel.

4.4 Net

4.4.1 Output



Output settings are used to set the coordinates and range of the network port.

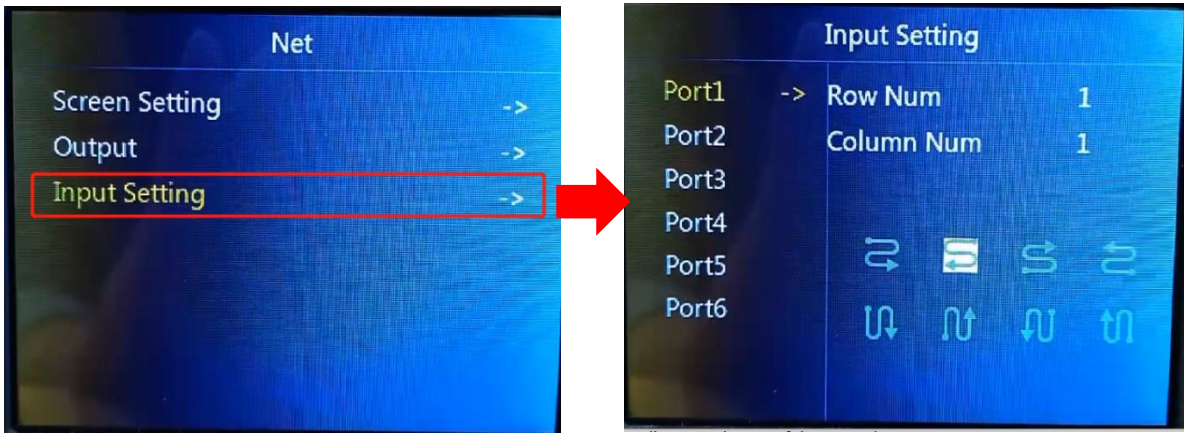
Horizontal width: 64—the width of the LED screen;

Vertical height: 64—the height of the LED screen;

X: Horizontal start: setting parameter range = LED screen width-horizontal width;

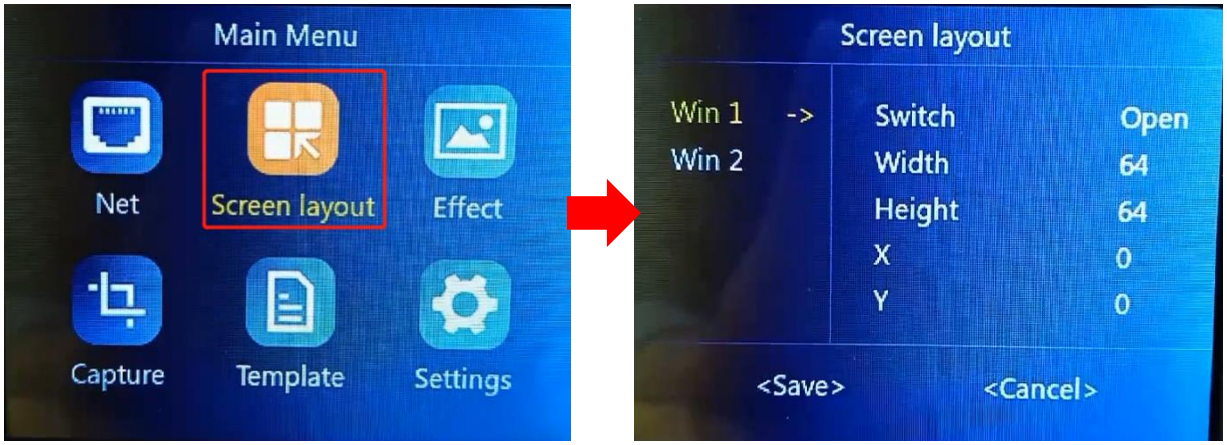
Y: Vertical start: setting parameter range = LED screen height-vertical height;

4.4.2 Input seting



The connection relationship is set as the connection relationship processing of the receiving card. Currently, only standard general mode is supported, and complex connection relationships are not supported.

4.5 Screen layout

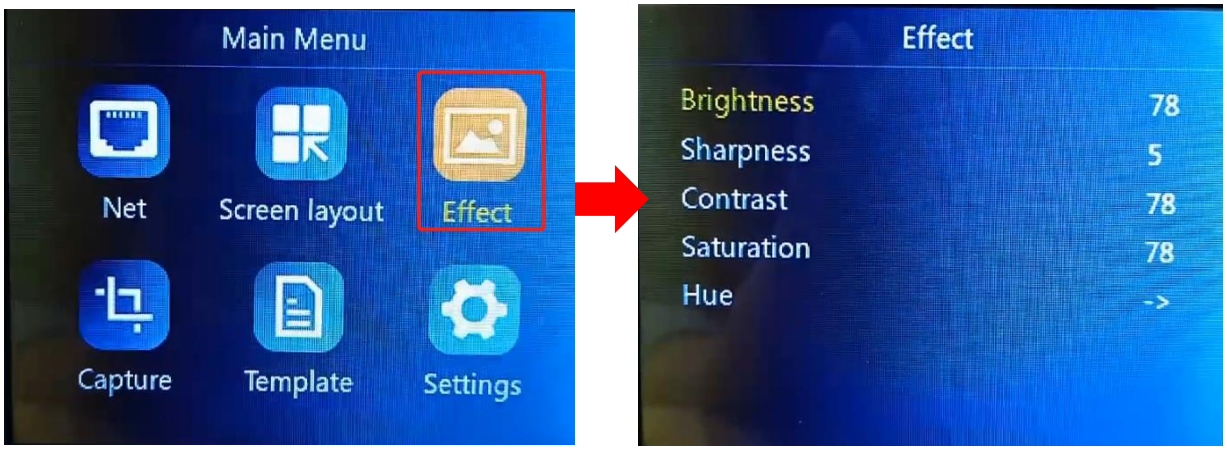


The screen switch setting of screen 1 cannot be set to off.

Horizontal starting value + horizontal width cannot exceed the width of the LED screen.

The vertical starting value + vertical width cannot exceed the height of the LED screen.

4.6 Effect



Brightness: 0-100 default 50

Sharpness: 0-10, default 5

Contrast: 0-100, default 100

Saturation: 0-100, default 50

4.7 Capture

When the intercept switch is off, the knob cannot select the intercept width, height, horizontal, and vertical start.

Intercept width: 10808—Maximum width of input source

Intercept height:640—Maximum height of input source

X: Horizontal start: horizontal start value range = input source width-interception width

Y: Vertical start: vertical start value range = input source width-interception width.

Note: If the size of the captured screen is the same as the screen size, it will be displayed point-to-point. If

the size of the captured screen is different from the screen size, it will be displayed by zooming.

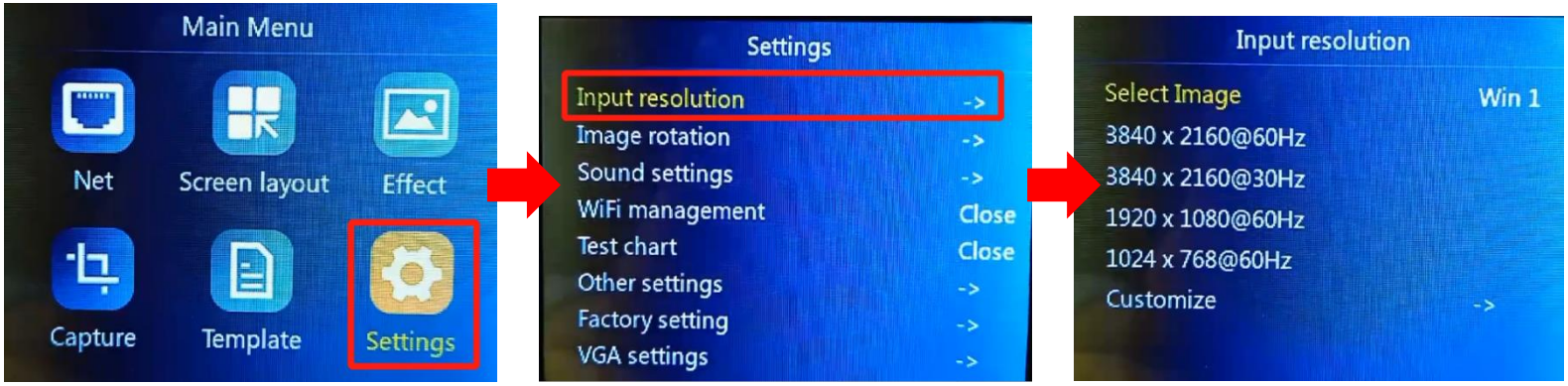
4.8 Template setting

You can save up to 8 templates. '★' mean this teamplate is already occupied.

Existing templates support replacement, deletion, and loading non-existent template option, supports saving up to 8 template files

4.9 Settings

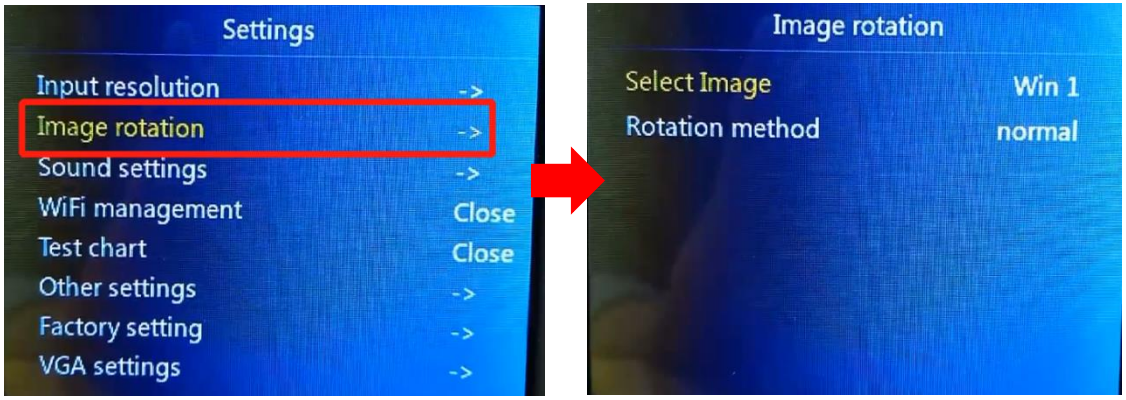
4.9.1 Input resolution



Supports three sets of general resolutions and supports custom resolution settings.

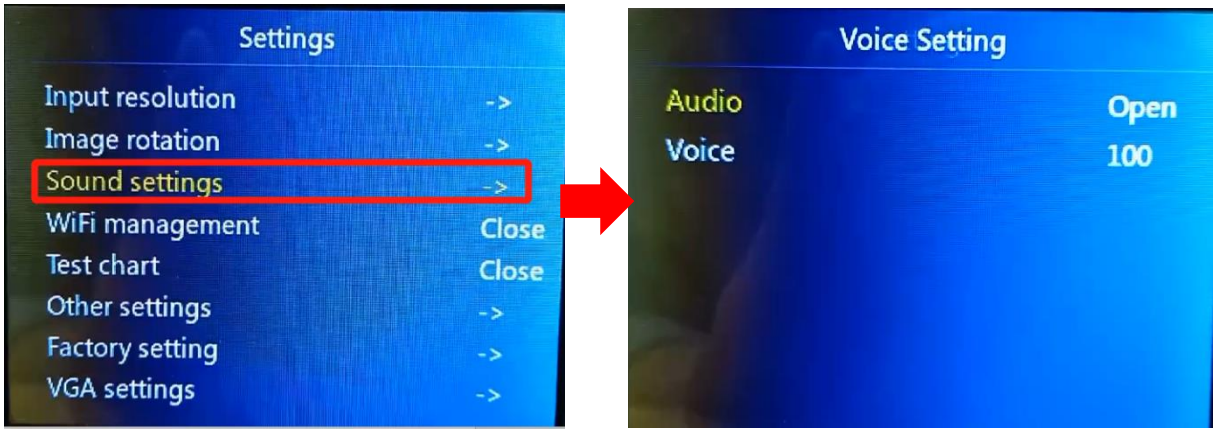
The default is 60Hz.

4.9.2 Image rotation



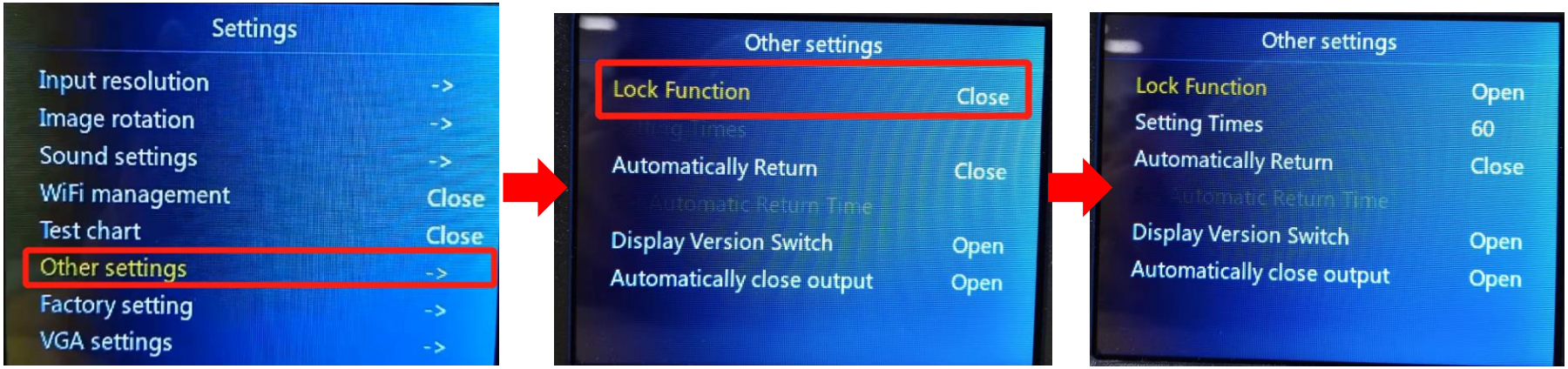
Select the window that needs to be rotated, support normal,Horizontal mirror, Vertical mirror, HV mirror.

4.9.3 Soud settings



Support turning on and off the sound, and volume adjustment

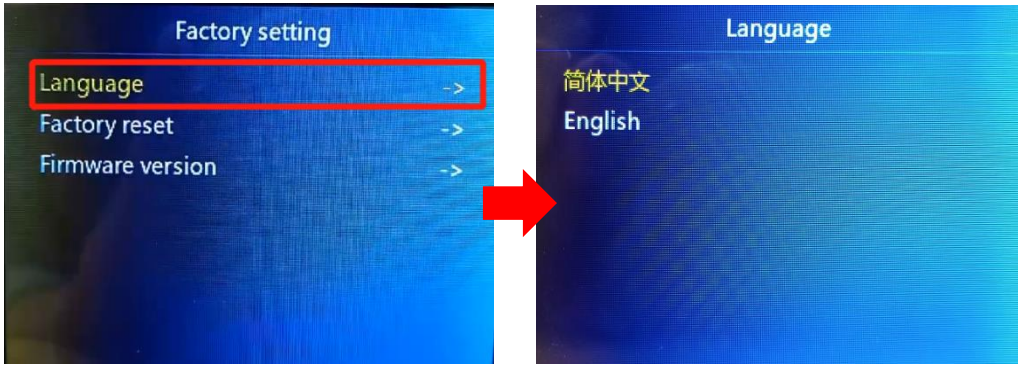
4.9.4 Other settings



The key lock, the maximum support time is 3600 seconds, the key lock is automatically locked after the set time, except that the key lock button functions normally, other buttons are locked, and the function does not work, the button of “LOCK” will light up, you can press the “LOCK” button to unlock.

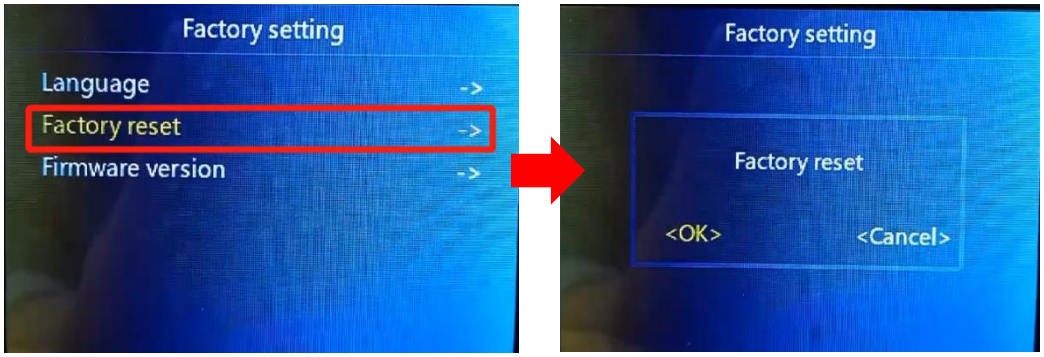
4.9.5 Factory setting

1. Language



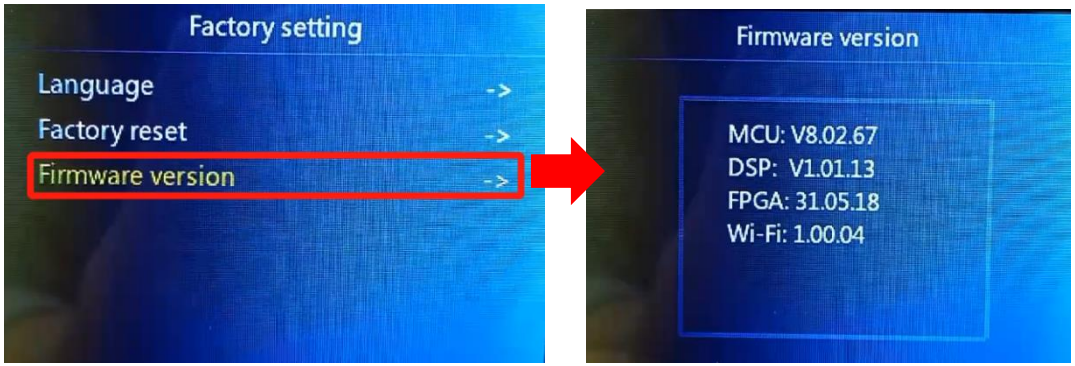
Language selection: support English, Chinese.

2. Factory reset



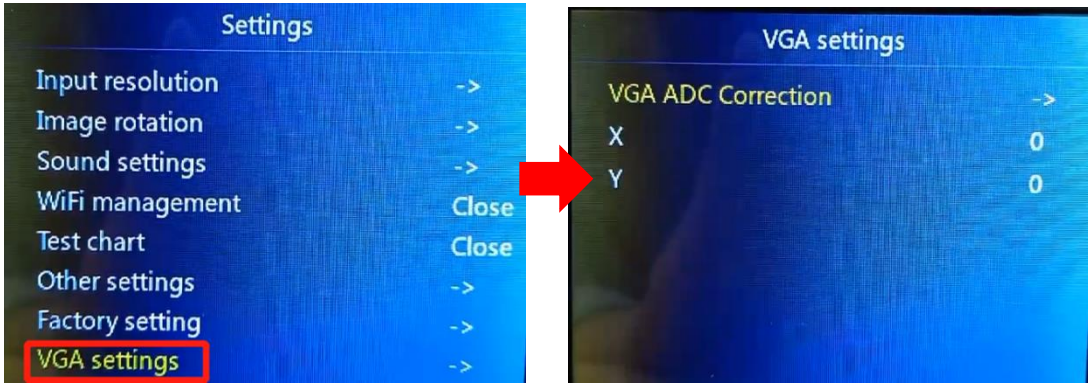
Restore the device to factory settings.

3. Firmware version



Check the device's MCU, DSP ,FPGA and Wi-Fi version.

4.9.6 VGA



When using the VGA interface, adjust the coordinates displayed on the screen.