

VIDEO WALL

User Manual

V2.0

For VE46L-A、VM46L-A、VP46L-A、VE49L-A、VE49H-A
VE55L-A、VE55H-A、VM55L-A、VP55L-A

Warning and Precautions

Electricity can provide many useful functions, but improper use will also cause harm to personal and property security, both the design and manufacturing of this product are based on the highest requirements of safety, improper use may cause harm, such as electric shock, fire damage, etc. To avoid such dangerous, please comply with the following instructions when users are installing, operating and cleaning. In order to ensure your personal safety and prolong the service life of the product, please read carefully before start using safety warning clause.

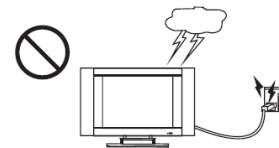
- 1. Read this instruction**
Before operating the unit, please read and understand all instructions.
- 2. Keep this instruction**
Please store this safety and operation instruction in safe place for future use.
- 3. Heed all warnings**
Please strictly abide by all the safety warning related to this product in this manual.
- 4. Follow the instruction**
Please follow all instructions.
- 5. Accessories**
Please use the attachments or accessories designated by manufacturer. Do not utilize the accessories recommended by illegal manufacturer, otherwise may cause accident.
- 6. Power supply**
The power supply utilized in this unit is marked on the power supply label. If you are not sure the power supply type in your area, please consult the local dealer or electric power company. To better protect the product, in the thunderstorm weather or when this unit is not utilized for a long time or when unattended for a long time, please unplug the power plug of this unit and disconnect the antenna, which will help to protect the product from damaged by lightning or power cord surging When need to utilize this unit with another type of power supply, please replace the power cord and consult to local dealer. Power outlet shall be installed in the place where is easy to connect and close to the unit. Please utilize the power cord designated by the dealer to ensure the safety and electromagnetic compatibility When the unit is needed to connect with VCR or computer, please turn off the power supply of this unit to avoid electric shock.
- 7. Power cord protection**
Please protect the power cord, especially the connection position among plug, socket and power cord with this unit should not be trampled.
- 8. Overload**
As for the wall socket and power outlet, do not overload use, to avoid fire or electric shock.
- 9. Objects fell into or liquid splashed into**
Don't insert objects from the ventilation hole or the hole of this unit. This unit has high pressure, the inserted object may cause electric shock or parts short circuit inside the unit So don't let water drop or liquid spill into the unit.
- 10. Maintenance**

Please contact maintenance issues to the authorized service personnel. When the unit is damaged by the followings, the unit is needed to be repaired: the power cord or power plug is damaged; liquid splashed into or solid fell into the unit, the unit is exposed to the rain or damp environment or the unit is dropped.

11. Conditions requiring maintenance

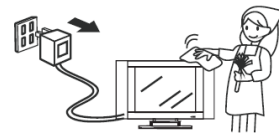
When any of the following conditions occurs, please pull the plug from the AC socket and contact the professional maintenance personnel for repair.

- a. Power cord or plug damages;
- b. When liquid splashed into or solid fell into;
- c. When the unit is exposed in rain or water;
- d. When do not operate according to the instructions described in the operation manual; do not carry out operation not regulated in operation manual, improper adjustment or setting may cause damage to the unit, at this time, it needs rectification or adjustment by professional technical personnel.
- e. When the unit falls or the case has any damage;
- f. When the unit displays abnormal conditions or significant changes, which indicates that the unit needs to be repaired.



12. Replace parts.

When the product's parts need to be replaced, please confirm that the parts utilized by maintenance personnel is designated by manufacturer, or original parts with same characteristics and performance. Usage of unlicensed parts may cause fire, shock and/or other hazards.



13. Safety inspection

When maintenance service is completed, please ask maintenance personnel to check safety performance of unit to confirm that the unit is under normal state.



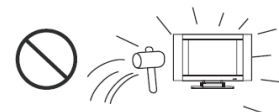
14. Wall hanging

When the unit needs to be hung on wall or ceiling, please make sure to install according to the method provided by the manufacturer. This concerns safety issues.



15. Holder

Please utilize the wheelbarrow, foot rest, tripod, holder or table designated by manufacturer or sold with the unit. Do not place it on unstable trolley, holder, tripod or table. Placing the unit on unstable surface may cause the unit to fall and injure personnel or damage the product. Please follow the manufacturer's installation instructions when it needs to be hung on wall. Please utilize the wall accessories recommended by manufacturer.



16. Move carefully

When moving with small car, please be careful to move the cart and the unit to avoid the fall of the unit and injuring personnel. Sudden stop, excessive force and uneven ground may cause the unit to fall from the cart. Do not utilize and move LCD Unit at work or standby mode.

17. Lightning strike

Please unplug the battery socket of the unit when the unit is not utilized for a long time or in thunderstorm weather.

For better protection of this product, please unplug the battery socket of the unit and disconnect the antenna in thunderstorm weather or when the unit is not utilized for a long time or unattended for a long time. This will help to prevent the damage to the product caused by lightning or online surge.

18. Please do not utilize this unit near water source.

For example, near the tub, wash basin, kitchen sink or wash basin; in a wet ground or near a swimming pool, etc. When moving the unit from a low temperature place to a high temperature place, water steam will be condensed, do not utilize in this case, otherwise it may cause fire, electric shock or other hazards.

19. Please clean with dry cloth.

Please remove the power cord before cleaning, do not utilize liquid cleanser or aerosol to clean this unit. Please utilize dry cloth when cleaning.

20. Ventilation opening

Please do not block any open ventilation hole. Please install the unit according to manufacturer's instruction. Both opening and ventilation holes in the unit casing are designed for ventilation. Do not plug these opening and ventilation holes. Insufficient ventilation may lead to overheating and may shorten the service life of the unit. Please do not place the unit on bed, sofa, carpet or other similar surface, because this will block the heat emission opening. This product design does not support embedded installation, unless there is adequate ventilation space or permitted in the manual by manufacturer, please do not install the unit in confined space, such as bookcases, shelf, etc.

21. Heat source

Do not install the unit near heat source such as heater, stove or other heating equipments (including efficacy).

22. Screen protection

The LCD screen is made of glass. Therefore, the screen may be broken when the unit falls or it is compressed by other objects. Be careful to avoid damage when the screen is broken.

23. Pixel defects

The LCD screen of this unit is a high-tech product, it can provide fine picture. Sometimes, some inactive pixels may appear blue, green or red fixed point on the screen, but that does not affect its performance.

Remarks: when utilizing this product, the product's power plug must be connected to the power supply outlet with protective grounding.

1 Product Introduction

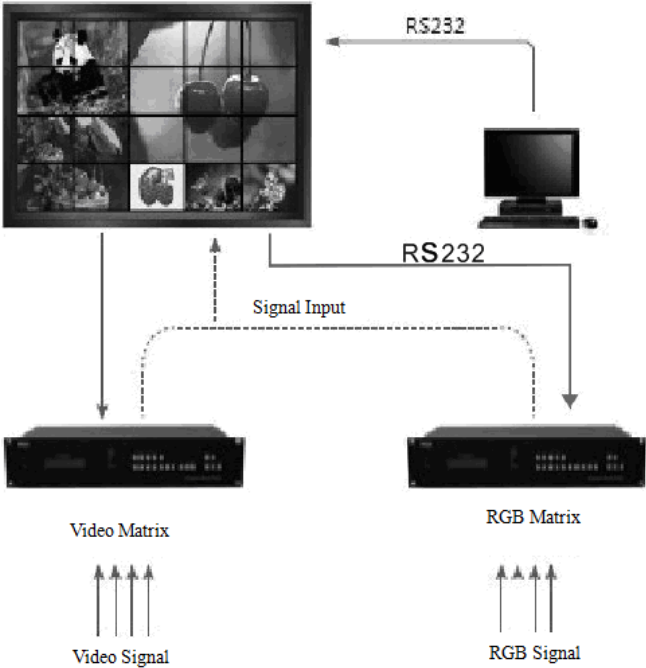
1.1 Product Advantages

- Ultra-narrow bezel: the ultimate splicing mode, the new experience of the huge screen viewing;
- Customized stitching: easy to spell matrix control, the screen can realize free combination;
- Simple split screen: automatic dislocation compensation, perfect seamless splicing;
- Multiple controls: the control port is very complete and the control mode is free to choose.
- Excellent control: multi-screen unified screen, enjoy the real big screen;
- High resolution: fine screen resolution, screen zoom freely; Highlight screen: highlight the screen to show the high quality view;
- Ultra wide Angle: visual range up to 178 °, each angle of wonderful view.

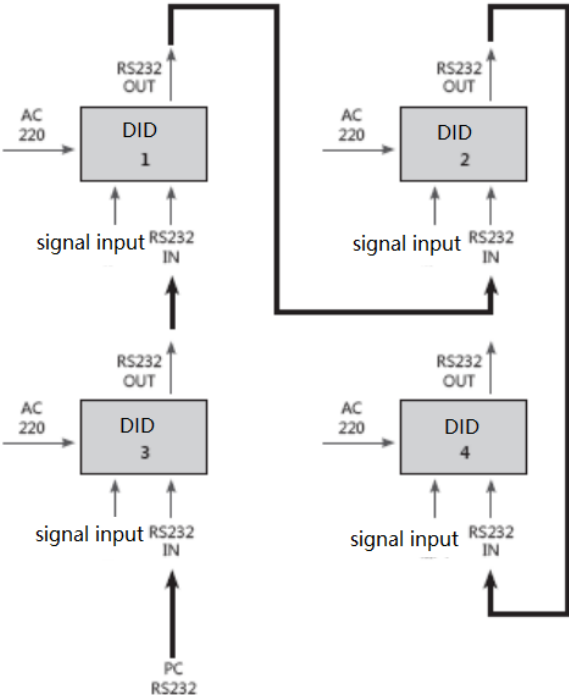
1.2 Product Characteristics

- the product supports 4K input, and when clicking 4 pieces of 1920 Mosaic screen (3840x2160), the point-to-point display can be realized, which means that the display screen is not compressed, and the display effect is clear and realistic.
- the product support DP loop - through, as long as the user input signal randomly, DP can output loop - through to the next screen DP input port, and this function can replace distributor and matrix (front signals access is 4 k, which means that it has replaced the 4 k and 4 k dispenser matrix) part of the function to use (product no longer needs to use signal distributor);
- the input signals support a 90-degree, 180-degree, 270 degree flip, and the rollover effect is excellent.
- support machine code (address code), and the line address is easy to recognize, because the user only needs to fill in the control software;
- it has the function of automatic signal detection. When the signal input is detected, it will automatically switch to the signal source.

1.3 System Connection Mode



The structure of the system



The block diagram of the screen wall (2 by 2)

1.4 Common Fault Handling

When the fault occurs, please cut off the power supply immediately. Please do not attempt to disassemble the machine to repair by yourself, which may cause a further damage. You can follow the steps below, if you still can not solve the problem, please contact your local dealer or professional repairing personnel. The products are out of the warranty scope when users repair them by themselves.

Phenomenon	Disposal
No boot (the power indicator light does not shine)	<ol style="list-style-type: none"> 1. Check whether the power line is damaged. 2. Check whether the power supply is accessed to electricity. 3. Verify that the power supply has been opened. 4. Check whether the power switch is damaged. 5. Check whether the insurance is fused.
All the splicing units are out of control	<ol style="list-style-type: none"> 1. Check whether the port settings of the splicing software are correct. 2. Check whether there is a damage in the serial line, and whether it is a good connection between the product and the PC interface. 3. Check whether there is a problem with the PC serial port, you can change another PC for testing. 4. Check whether the address of the splicing unit is correctly set according to the address setting instructions.
Some individual splicing units are out of control	<ol style="list-style-type: none"> 1. Check whether the address of the device are correctly set. 2. Check whether can control a single unit separately.
No VGA/DVI input of single or multiple devices	<ol style="list-style-type: none"> 1. Check whether the interface between the unit board and the signal source is well connected. 2. Change another VGA/DVI line to test. 3. Check whether the device is arranged in the corresponding input state. 4. Check whether the input signal is beyond the scope of this product input. 5. For DVI input, confirm the DDC capture and the output.

2 Interface and Dimension

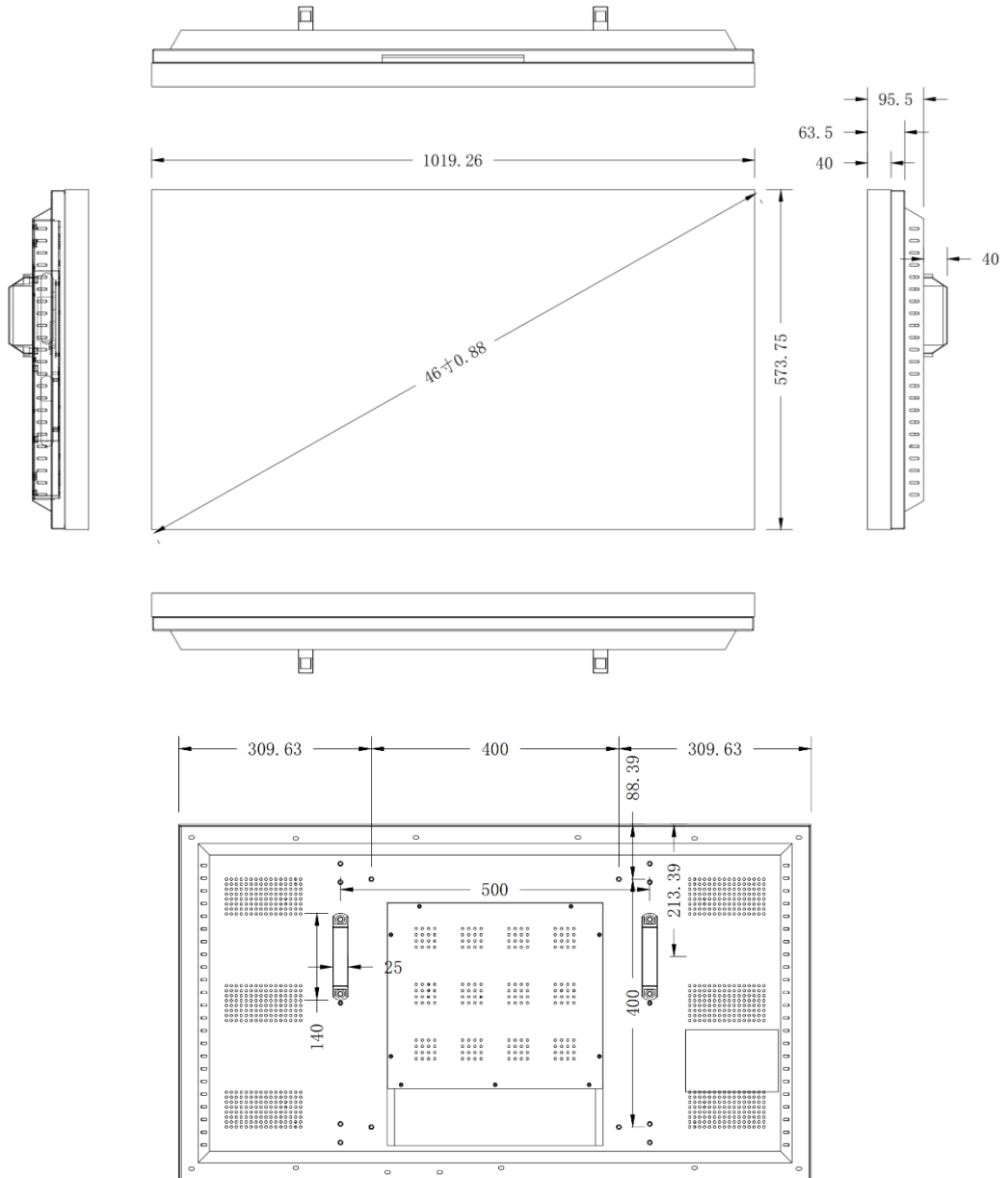
2.1 Interface Specification



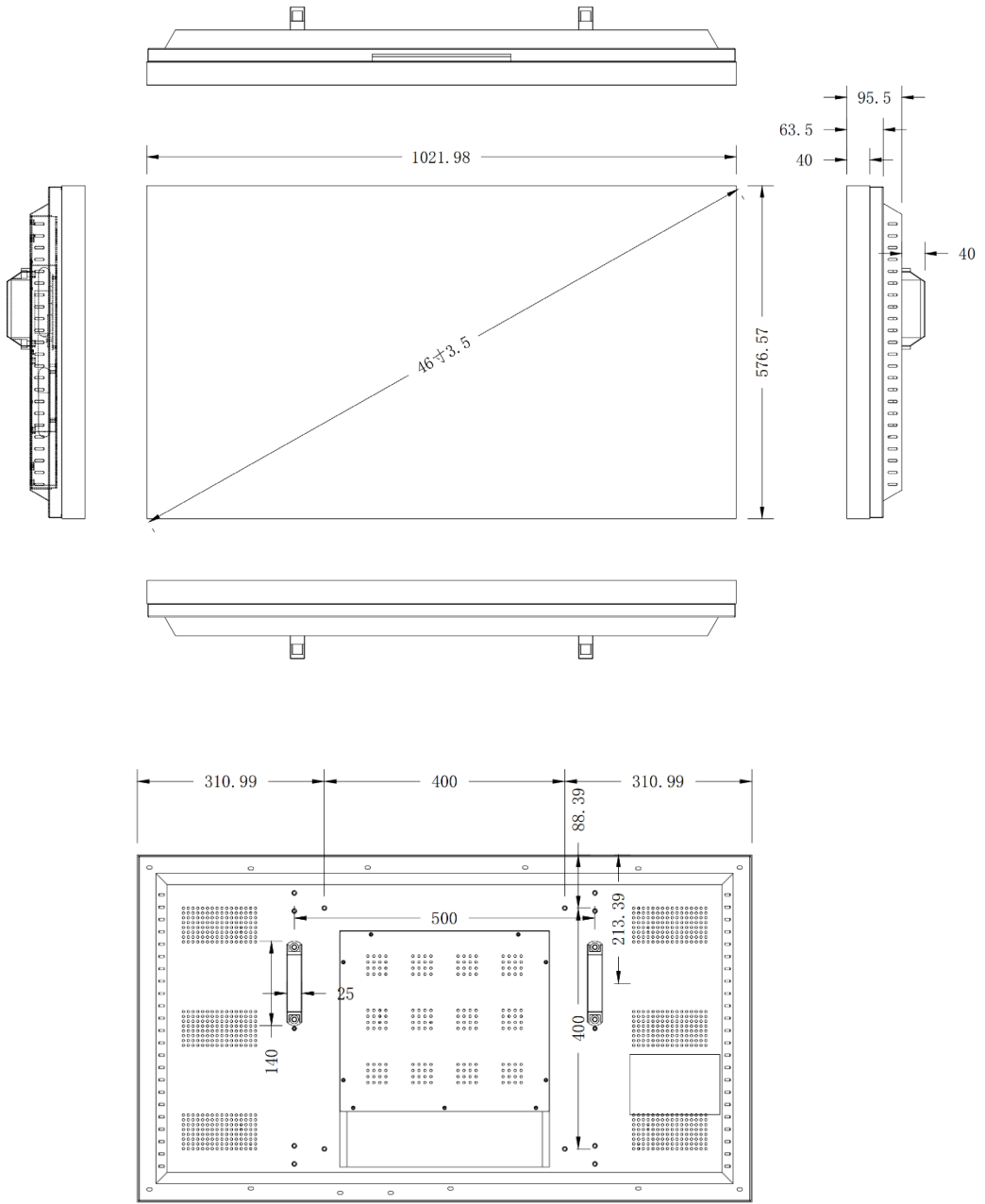
Port	Description
DVI input	DVI interface input, Up to 1920x1080 60hz
HDMI MHL	HDMI digital signal input, Up to 1920x1080 60hz
HDMI 4K	HDMI digital signal input, Up to 3840x2160 60hz
DP input	DP digital signal input, Up to 3840x2160 60hz
VGA input	VGA analog signal input, Up to 1920x1080 60hz
DP output	DP Daisy Chain output, Up to 3840x2160 60hz
RS-232 input (RJ45 jack)	serial command input for remote control
RS-232 out (RJ45 jack)	Serial Daisy Chain output for remote control
AC Input	Power Supply

2.2 Product Outline Dimension Drawing

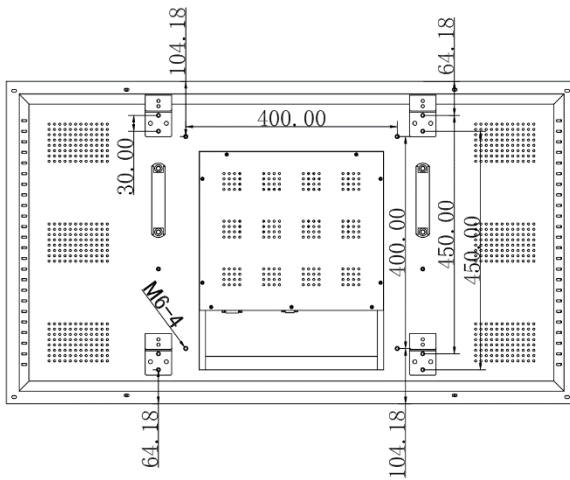
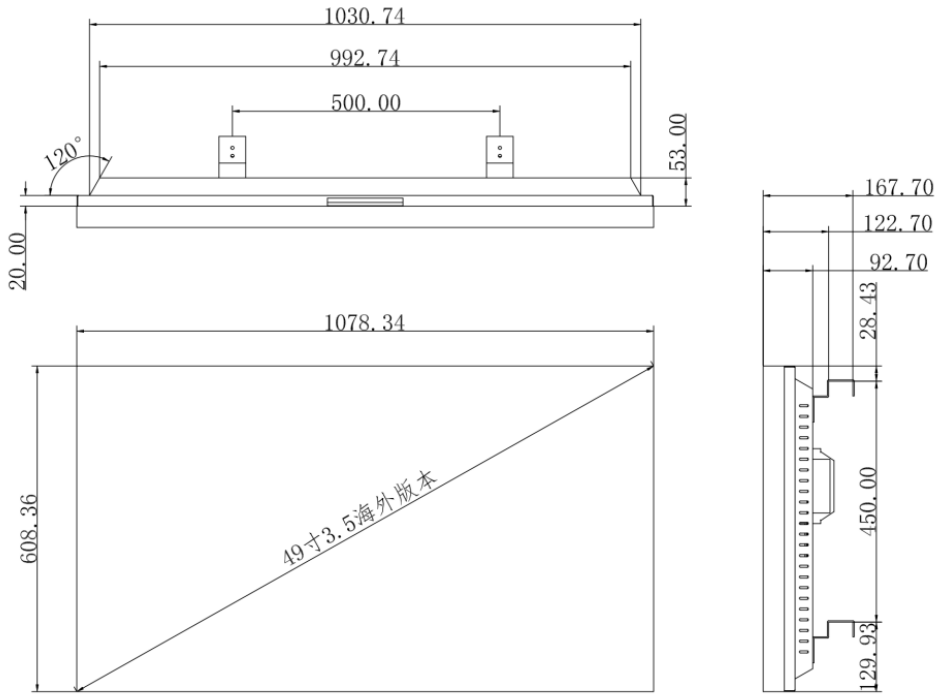
2.2.1 46 inch 0.88mm Bezel Model



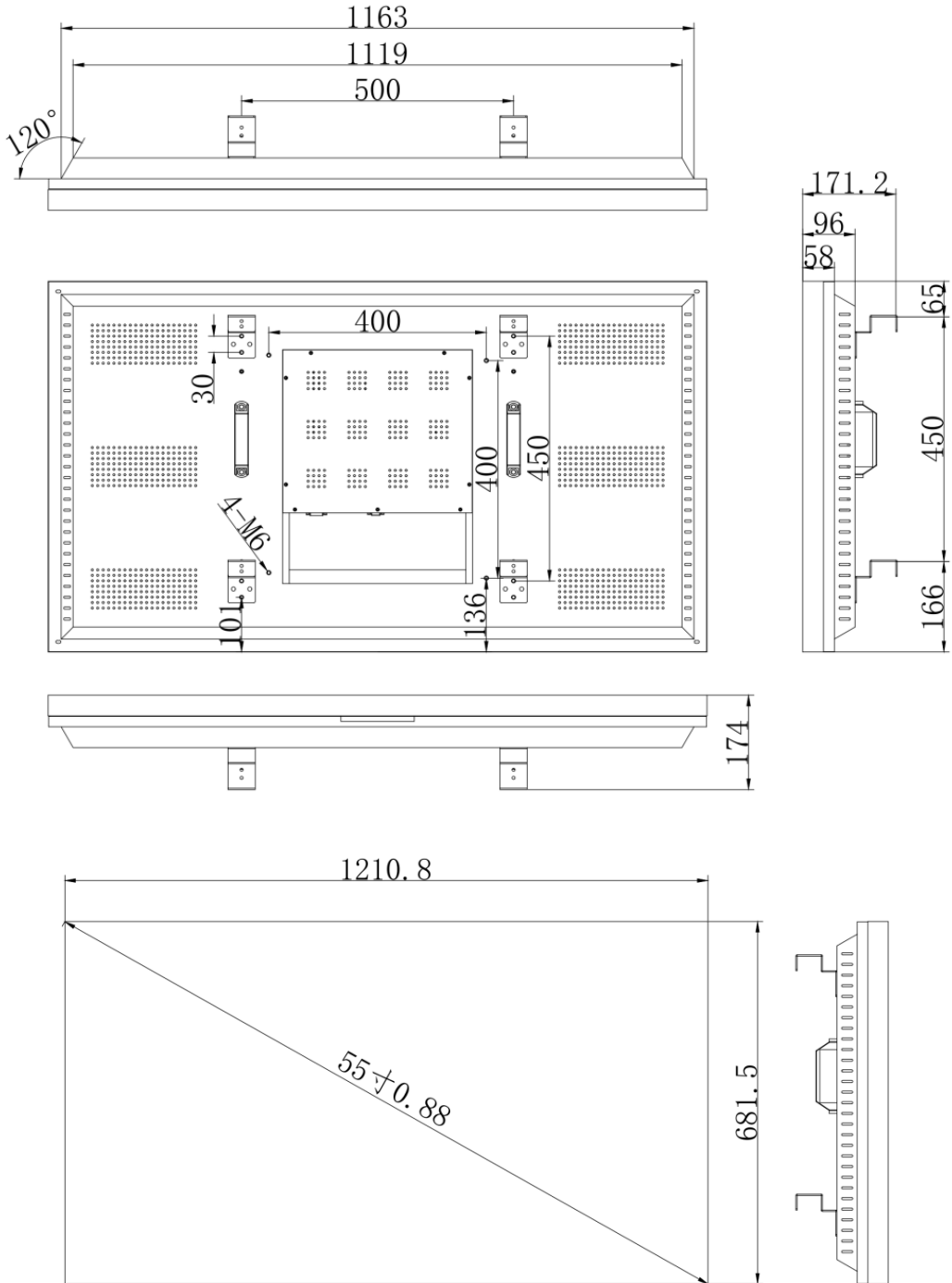
2.2.2 46 inch 3.5mm Bezel Model



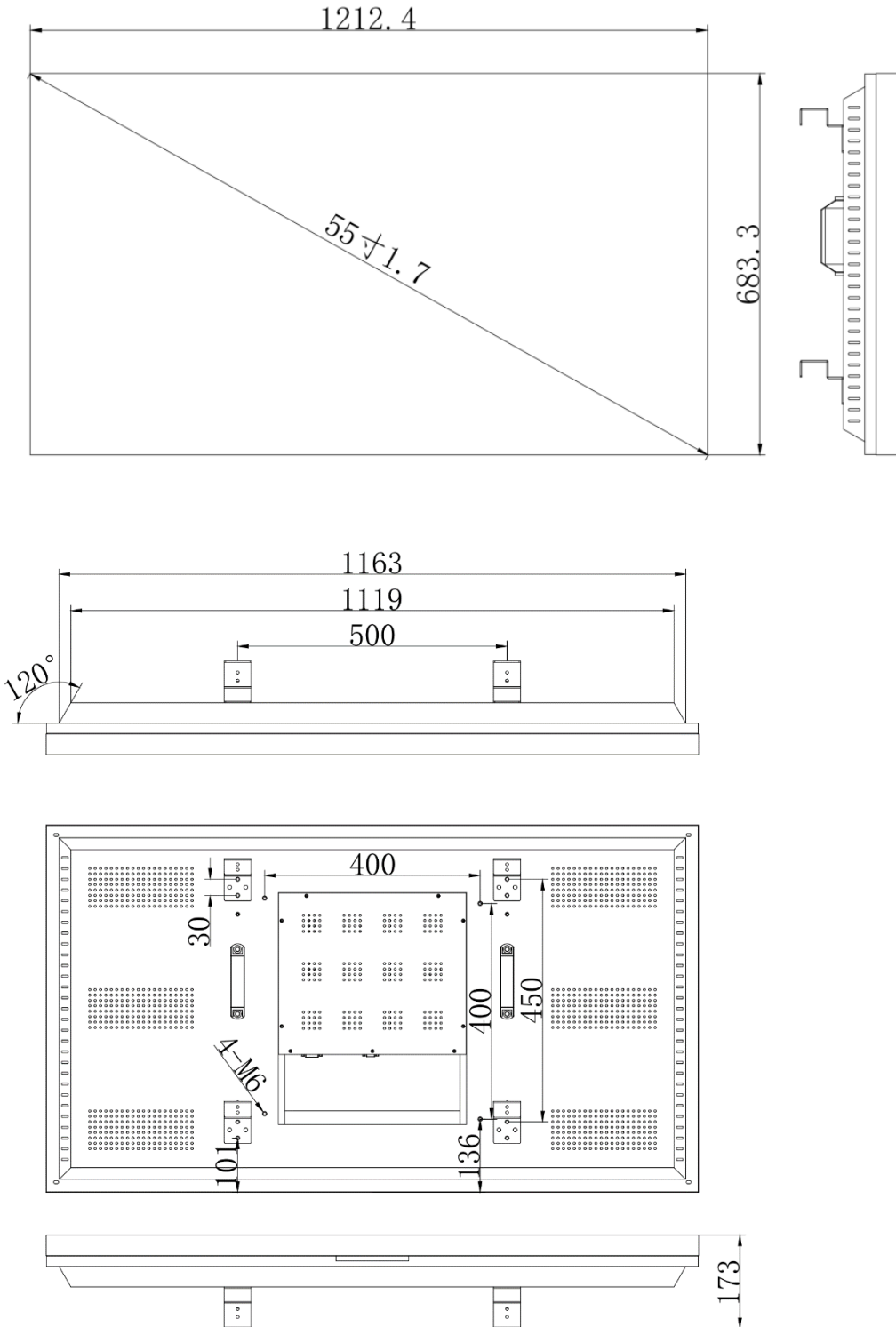
2.2.3 49 inch 3.5mm Bezel Model



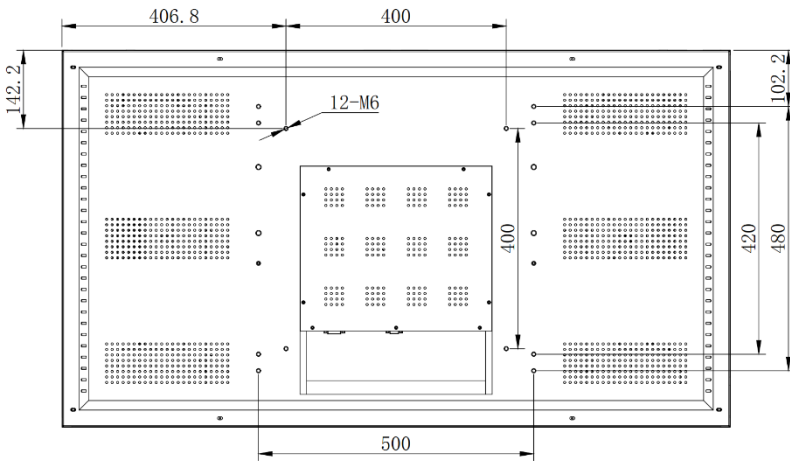
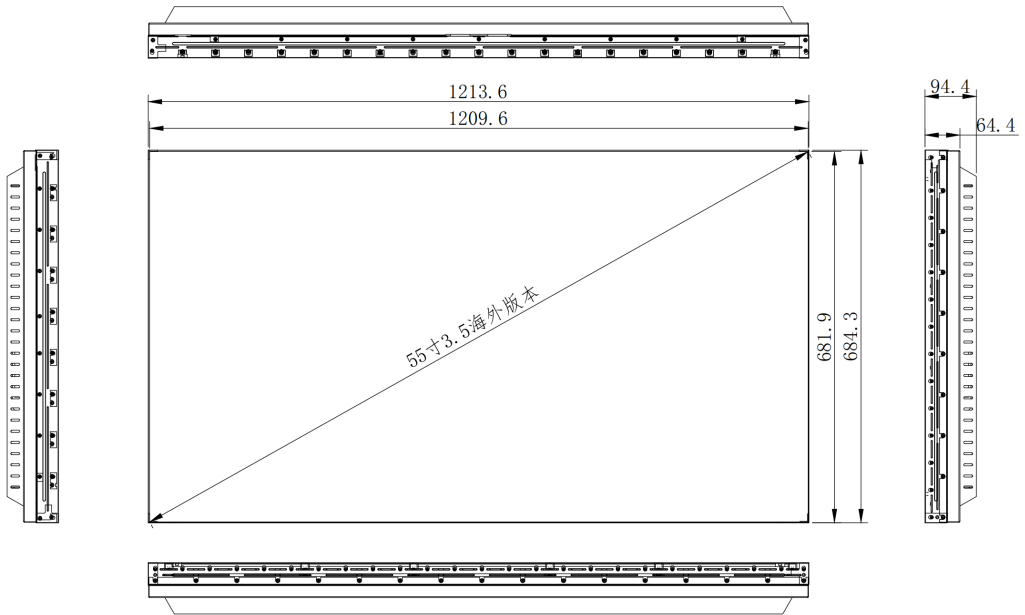
2.2.4 55 inch 0.88mm Bezel Model



2.2.5 55 inch 1.7mm Bezel Model



2.2.6 55 inch 3.5mm Bezel Model



3 PC Control Software

3.1 Running Environment

- **System** : English or Chinese operating system of Windows98/2000/NT/XP/WIN7/Vista
- **The minimum configuration of CPU** : Dual core 2.0GHz and above
- **Memory** : 1GB
- **Display card**: Standard VGA, 256 color display mode and above
- **Hard disk**: A typical installation 10M
- **The serial communication interface**: Standard RS232 communication interface or its compatible model
- **Other equipment**: mouse

3.2 Starting the Software

Before running the Software, ensure the following normal connection:

- The RS232 line of the computer for the software is properly connected to the controller.
- Both the relevant signal lines of the controller and power line are connected correctly.

System operation procedure:

1. open the power supply of the controller, the indicator light will light up.

Green stands for a startup state; orange stands for a standby state.

2. operate of the software

Extract the splicing control software RAR, you can get the following files: user logo, automatically adjust

the picture VGA, serial debugging, LCDWall.exe, LcdWall.exe. manifest, MWS_Cfg.ini. The control

software is a green version, no need to be installed. Run the Lcdwall.Exe, and then it appears as shown in

Fig. 1.

Note: All the operations must be open in the serial port

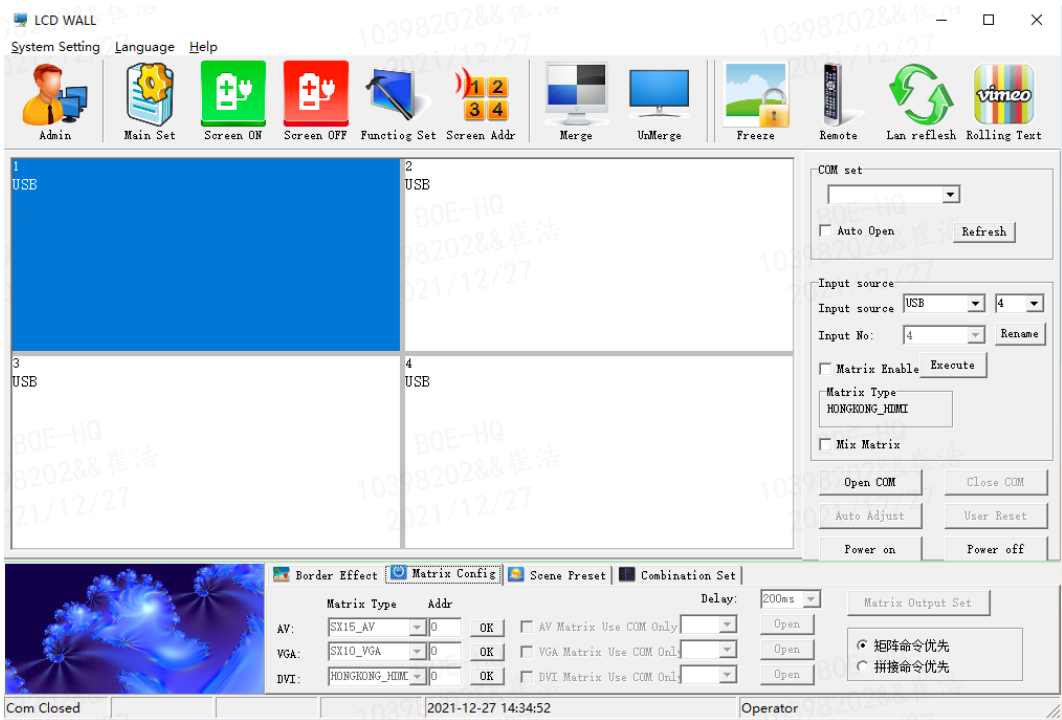


Fig. 1

Note: The contents of interface may differ from the example shown above with the different version of the software; You may consult our relevant customer service staff.

The function description of the operation interface is shown in Fig. 1:

- **Operation zone:** each grid element represents the corresponding controlled screen, you can select the corresponding controlled unit through the keyboard or the mouse clicking or dragging.
- **Function zone:** contains commonly used function buttons.
- **User's title zone:** the users can change the displays of the title according to their own requirements.
- **Status zone:** displays the port state and the operation authority state, and the current local time, date, etc.

3.3 Settings of the software

1. Click the function diagram of "serial port settings", the interface is shown as in Fig. 2.
2. Click "refresh" button to mate COM automatically, and then click "open" to achieve connection.

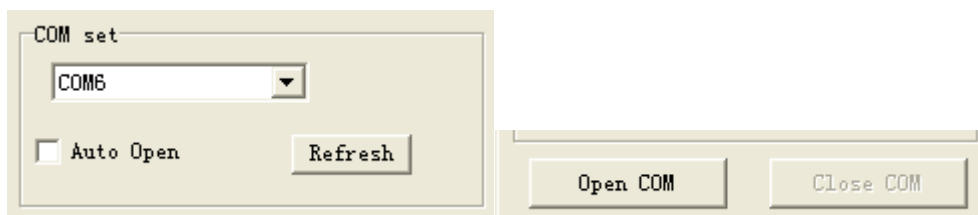


Fig. 2

- The rows in "Wall Settings" are set according to the actual needs.
- The following 2X2 in XP for example to explain
- If the splicing wall is 2X2, the splicing array must be set to 2X2, otherwise it will be spliced incorrectly

3.4 Device ID Setting

All equipment in the factory serial number are 1, the user should set the screen serial number according to their own needs.

1. Administrator users enter the "curtain wall address" setting
2. For each screen display machine code, fill in the corresponding target serial number
3. Click modify to complete the modification of the screen serial number

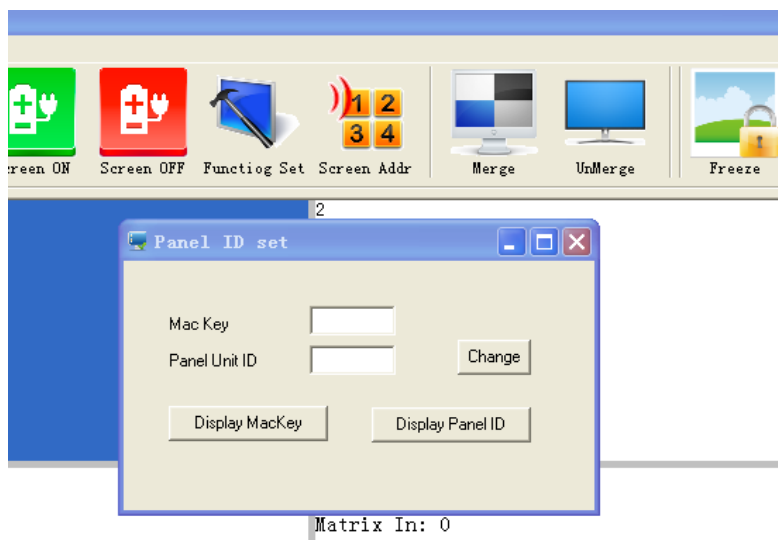


Fig. 3

Note:

- When this function modifies the serial number, read the machine code displayed on the screen and modify the corresponding screen serial number.
- "System Settings" button can only be operated after entering the administrator password
- The default administrator password is 111111, which can be modified by yourself, please keep in mind the modified password.
- The remote control is only useful under the multimedia channel

3.5 Single machine operation

You can choose a single or multiple splicing units to set on/off of the unit(s), and you can also right click the mouse to set the input signal, or click on the "Freeze" to freeze the current image, and click again to cancel the freezing.

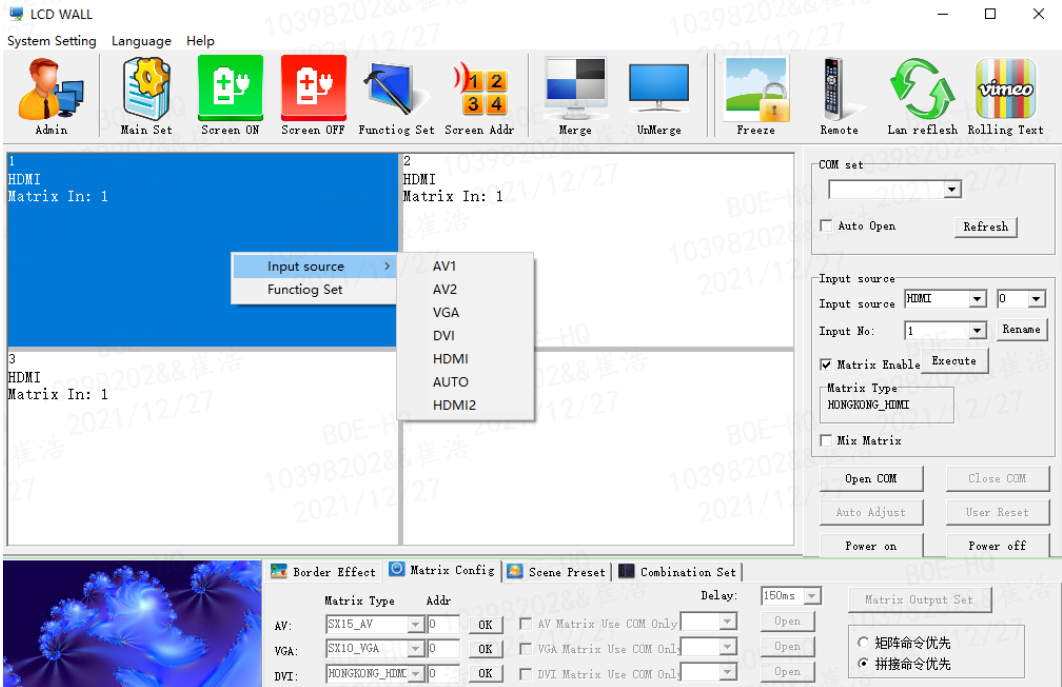


Fig. 4

3.6 Merge operation

For multiple splicing units, 2 by 2 for example, after selecting the 4 screen, select the signal source in the signal sources, click the "execute" button to complete the splicing. You also can click on the "image freezing" to freeze the current image, and click again to cancel the freezing.



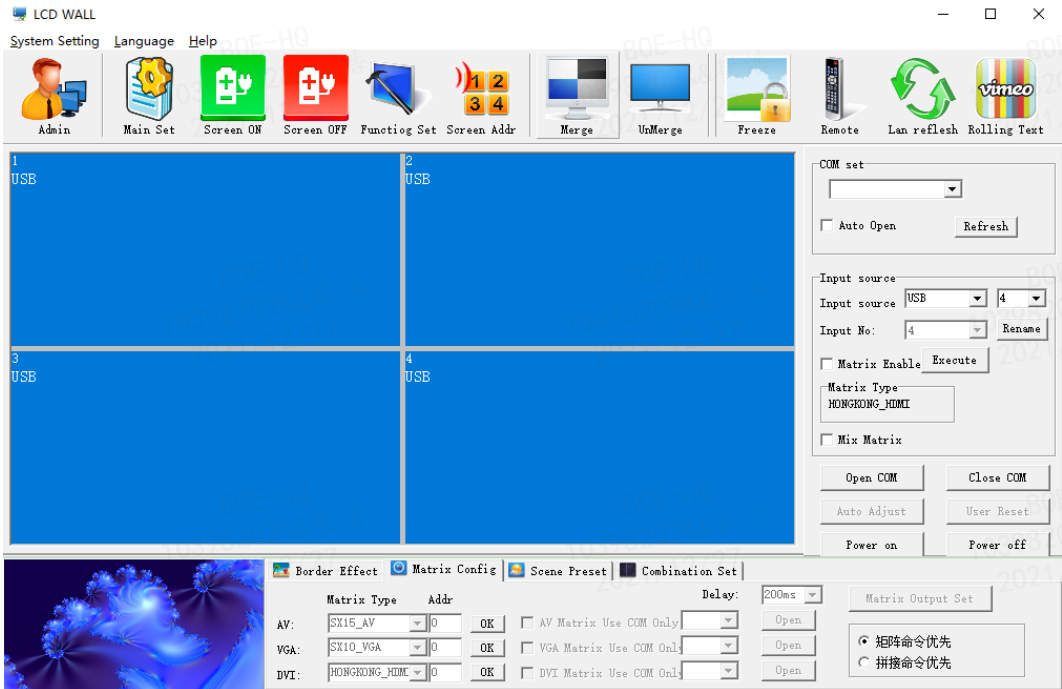


Fig. 5

After Merge, there will be physical seams between the units, you can select the "eliminate the border" and set up corresponding values to realize the image coherence

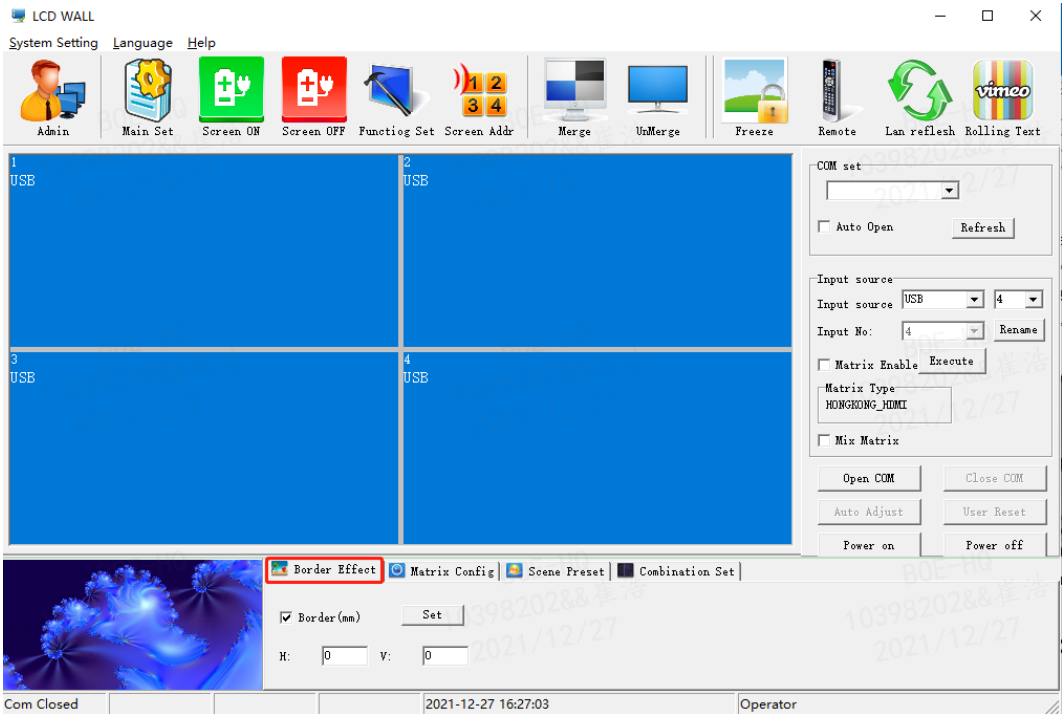


Fig. 6

Note: the frame value is set according to the physical frame of the screen. For example: the length of the Video Wall Set frame is 10mm, and the value should be set to 10. Fig. 6 shows the effect of removing frames.



This function of removing frames is not used.

This function of removing frames is used.

Fig. 7

3.7 signal source selection

select signal source, and click Execute button

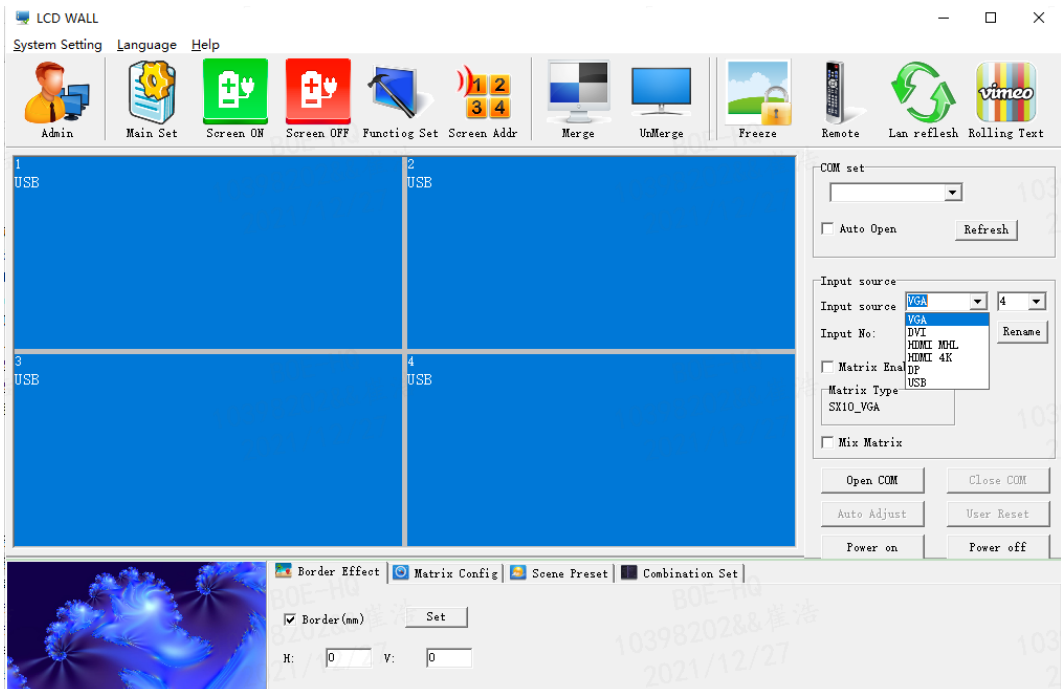


Fig. 8

3.8 Matrix Enable

1. Select: Matrix Enable, and select the matrix input No:

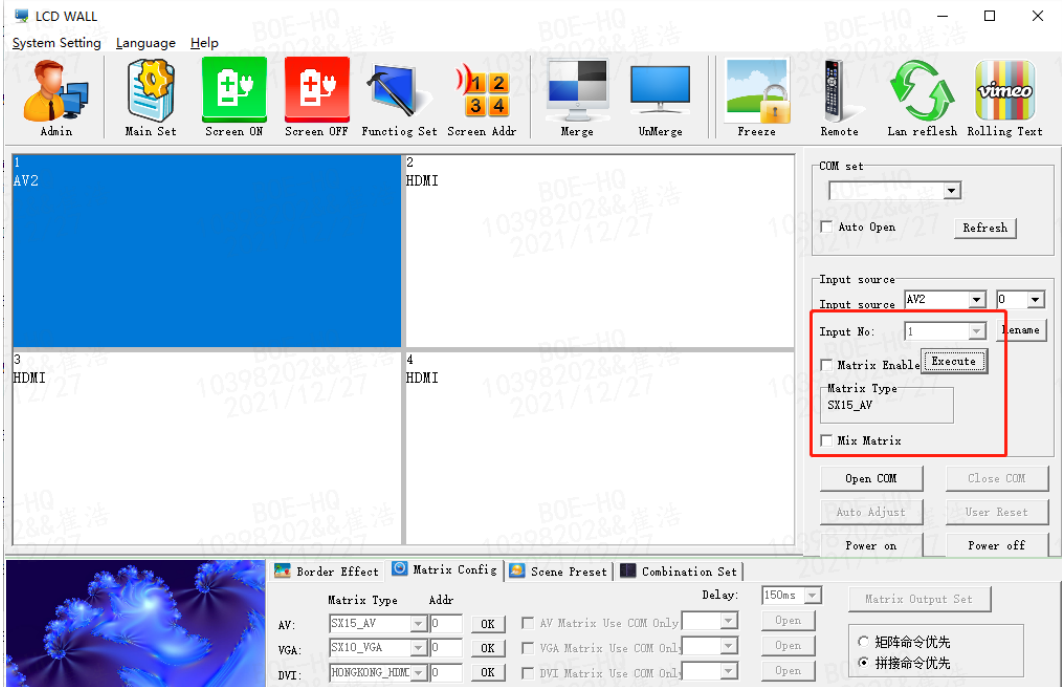


Fig. 9

2. Select the matrix type and configure the matrix ID

Note: different matrix selection has the different time delay

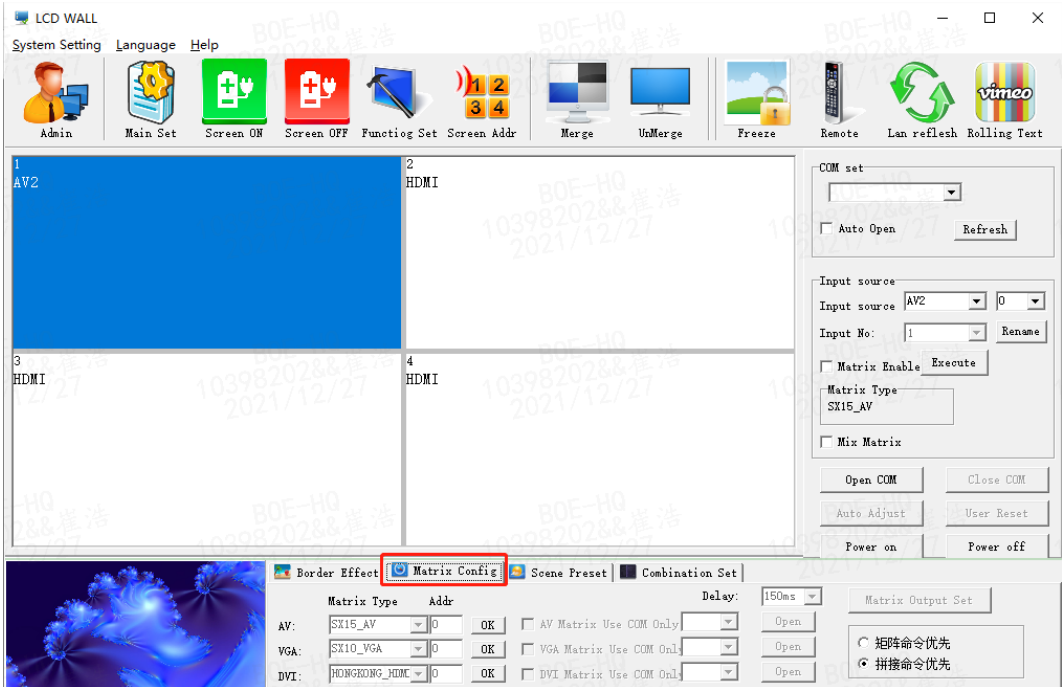


Fig. 10

3.9 Scene Preset

- It supports to save 16 kinds of Scene Select whose names can be modified.
- Scene Select to be saved, then click "Save Scene", and the model is saved.
- The "load Scene" can call the users saved mode.
- The polling mode of the scenes can be started according to users needs.

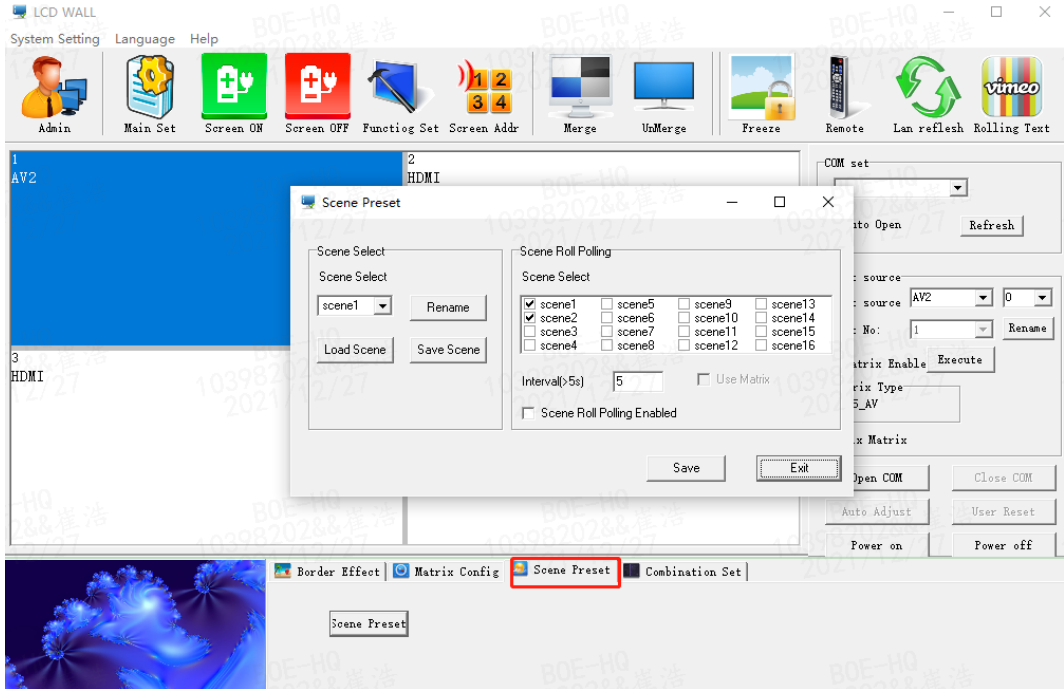


Fig. 11

3.10 Software settings

1. Click the Admin button and enter the super Administrator Password **111111** in the pop-up dialog box.

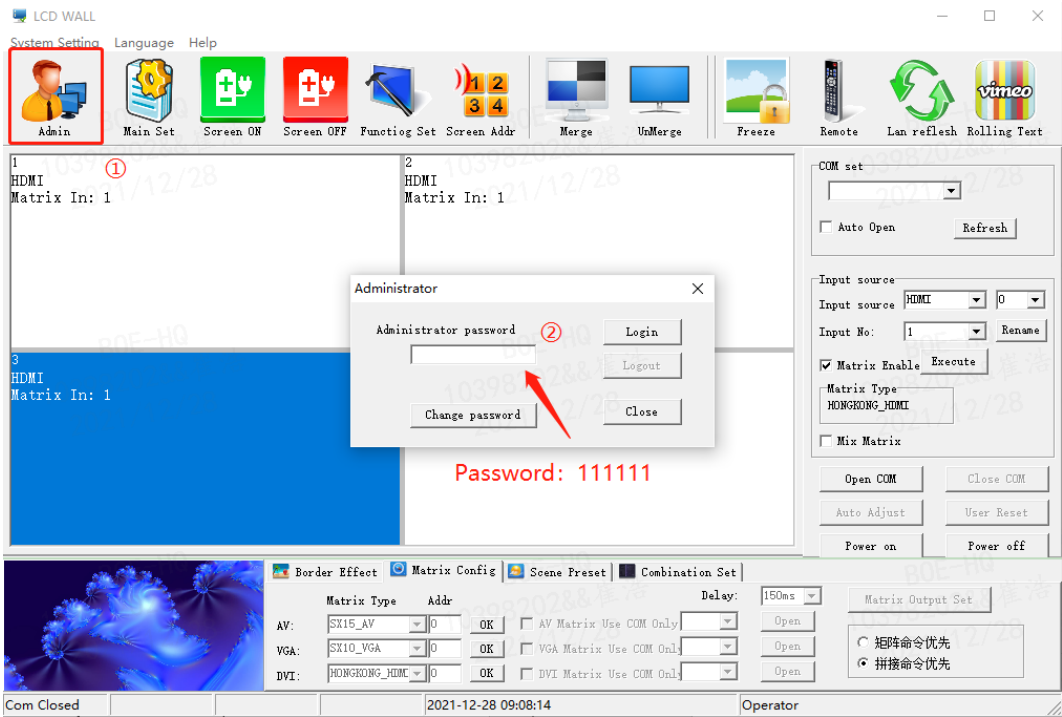


Fig. 12

2. Click the Main Set button, and make the following settings in the pop-up dialog box

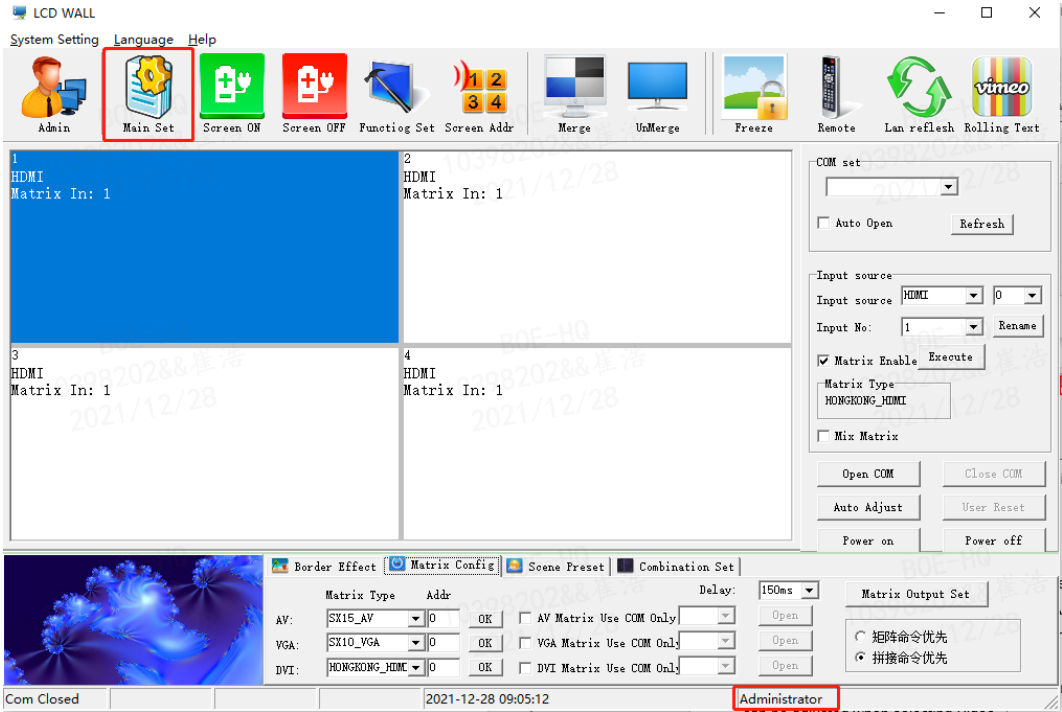


Fig. 13

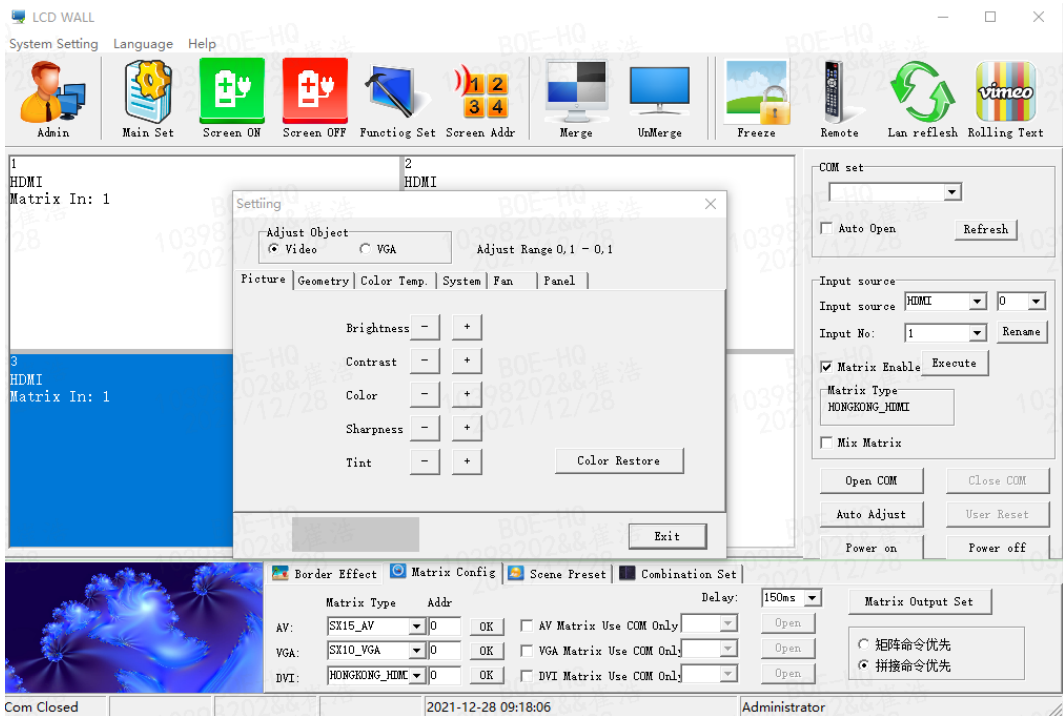


Fig. 14

Note: Only the administrator can access the settings.

In this menu, the two options of Video and VGA are set by different signal sources; and each of the settings in the splicing unit will display correspondingly.

3.10.1 Picture Setting

When Video is selected in Adjust Object, "Brightness", "Contrast", "Color", "Sharpness", "Tint", and "Color Restore" can be set.

When VGA is selected in Adjust Object, only "Brightness", "Contrast", and "Color Restore" can be set.

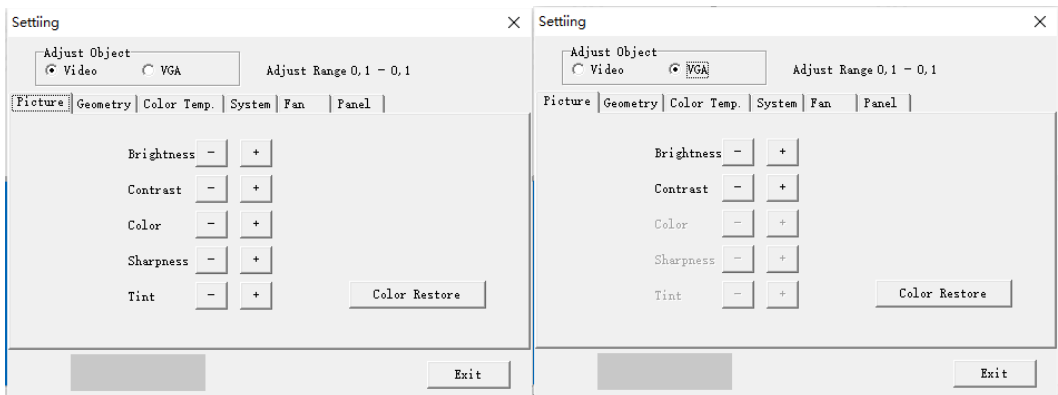


Fig. 15

3.10.2 Geometry adjustment

When Video is selected in Adjust Object, "HPosition", "Hsize", "VPosition", "Vsize" can be set.

When VGA is selected in Adjust Object, "HPosition", "VPosition", "Clock", "Phase" can be set.

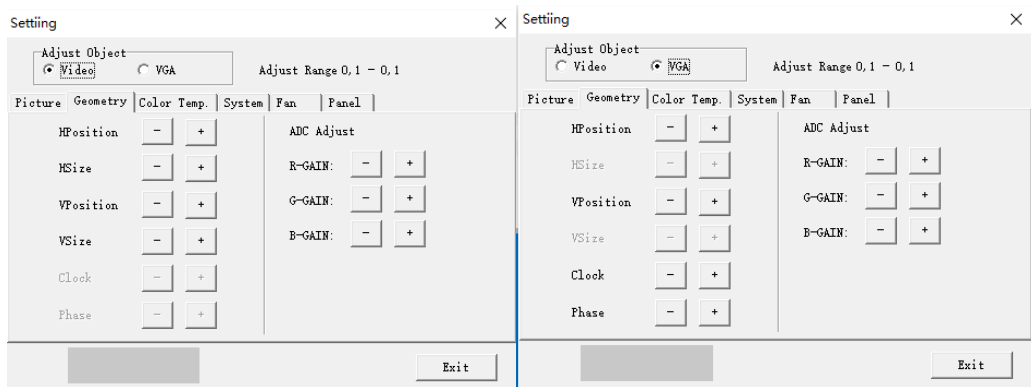


Fig. 16

Note: ADC Adjust is not available

3.10.3 Color Temp

Whether you choose Video or VAG, you can set the white balance



Fig. 17

3.10.4 System adjustment

Under the System menu, you can set the machine's curing software, including backlight brightness adjustment, no signal blue and black screen mode, software upgrade, VGA position and color automatic adjustment, etc.

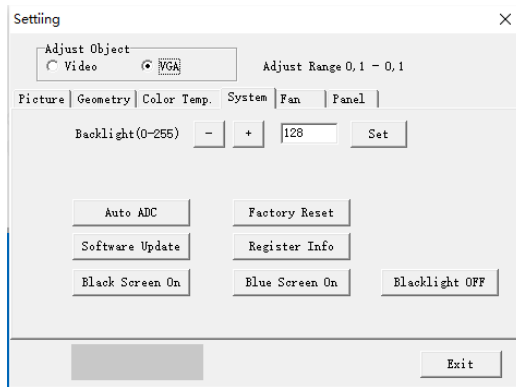


Fig. 18

Professional terminology explanation:

- Backlight : Used to adjust the LCD lamp brightness, not related to the signal.
- Auto ADC : When the value captured in VGA state is not correct and the color display is not normal, click this button to re-capture, can repeat multiple clicks (Note: used in the splicing unit single screen display).
- Blue Screen On : When clicking this button, the blue screen mode hits, and when there is no signal, the display is blue screen. Receive a signal signal after normal display.
- Black Screen On : When this button is clicked, the black screen mode is played, when there is no signal, the display is black screen. Receive signal After the normal display (Note: This function is more practical in some special occasions such as night clubs).
- Factory Reset : After setting the confusion, you can click this button to restore the machine to the factory state. (Note; without the manufacturer's permission, no user reset)

3.10.5 Screen Add

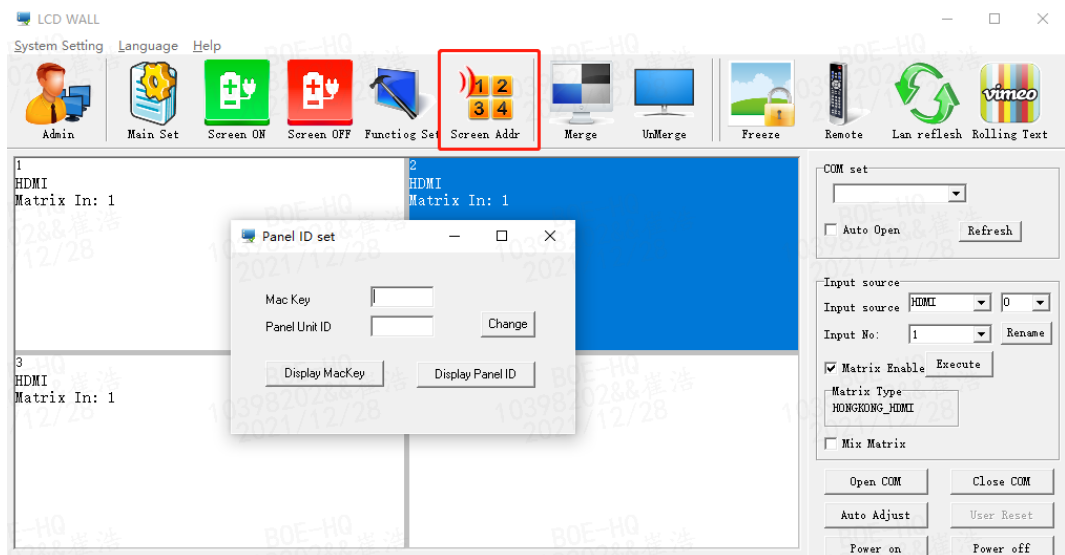


Fig. 19

Select Screen Add, pop-up to the picture box as Figure 19.



Fig. 20

All splicing control box in the factory address are 01 01, the user should set the address according to their own needs

Setting method is as follows:

1. Display the screen machine code, at the bottom of the screen, as shown in Figure 20.
2. Software select Screen Add, pop-up to the picture box
3. Set the corresponding screen address, click Modify to complete the modification of the address

3.10.6 software upgrading

1. Copy the software MERGE.bin to the root directory of the USB stick without changing the file name.
2. Insert the USB disk into the USB port of the video wall.
3. As in Figure 21, click on the software upgrade, the screen will become blue, the progress of software update will be displayed in the upper right corner, and the power indicator will flash green/orange alternately, and the upgrade will restart automatically after completion.

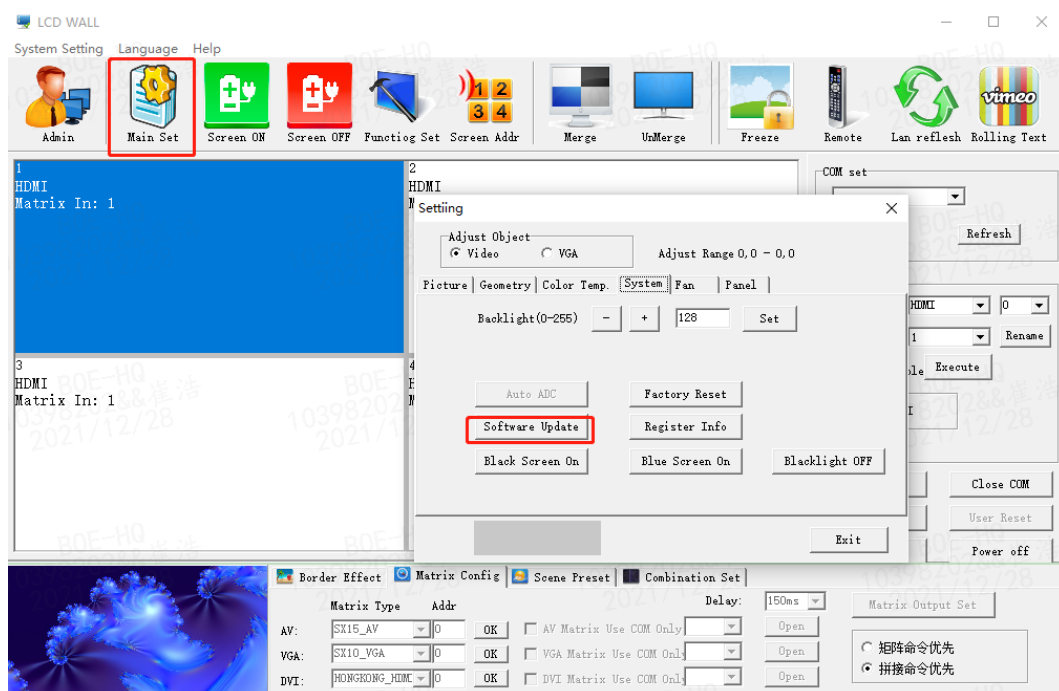


Fig. 21

Note: This function in the upgrade process, please do not power off and unplug the U disk, otherwise it will damage the machine

3.10.7 Fan Set

Our video wall is not equipped with fans, this feature is temporarily unavailable

3.10.8 Panel adjustment

Adjustment as shown in Figure 21, it is recommended to have a professional adjust

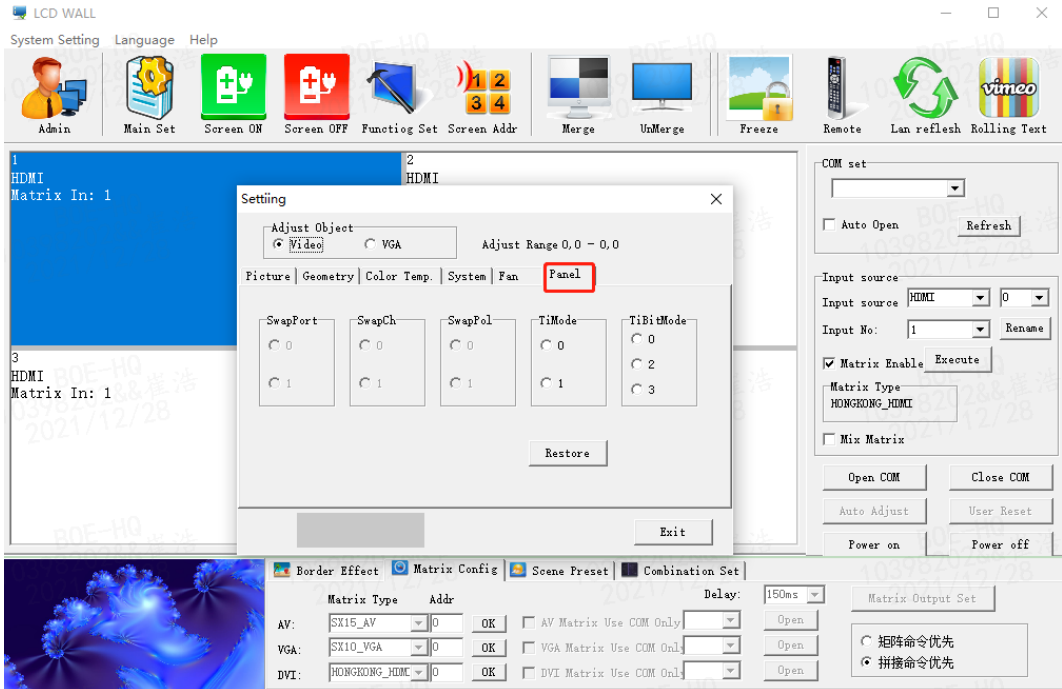


Fig. 22

3.11 Funtiog Set

1. Click the Admin button and enter the super Administrator Password **111111** in the pop-up dialog box.

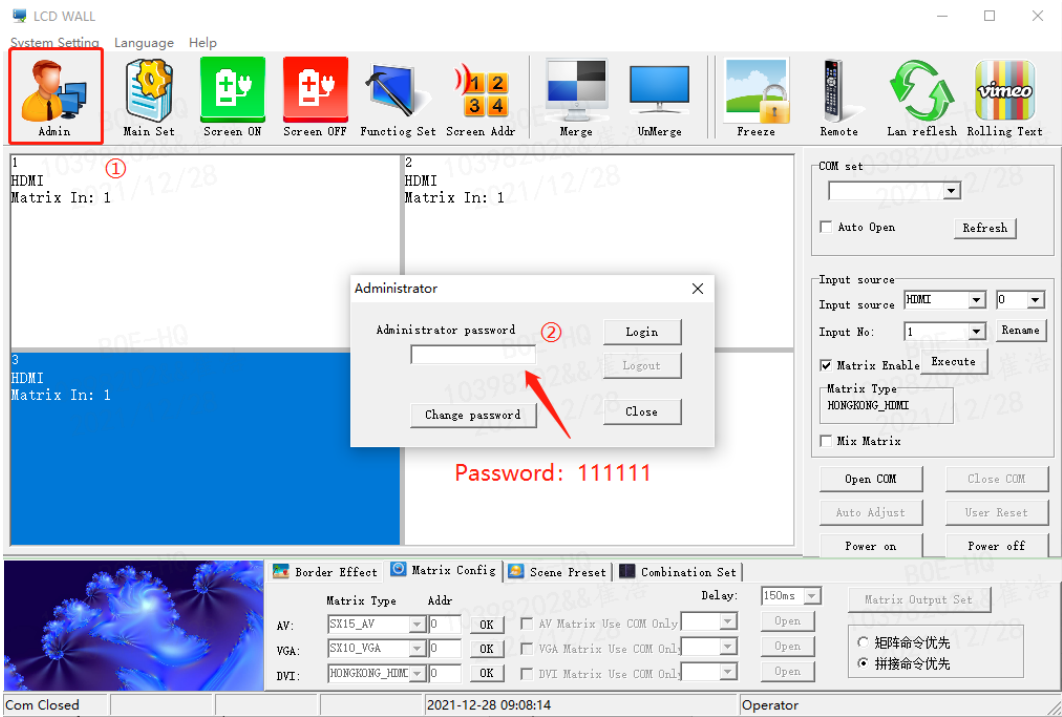


Fig. 23

2. Click the Funtiong Set button, and make the following settings in the pop-up dialog box

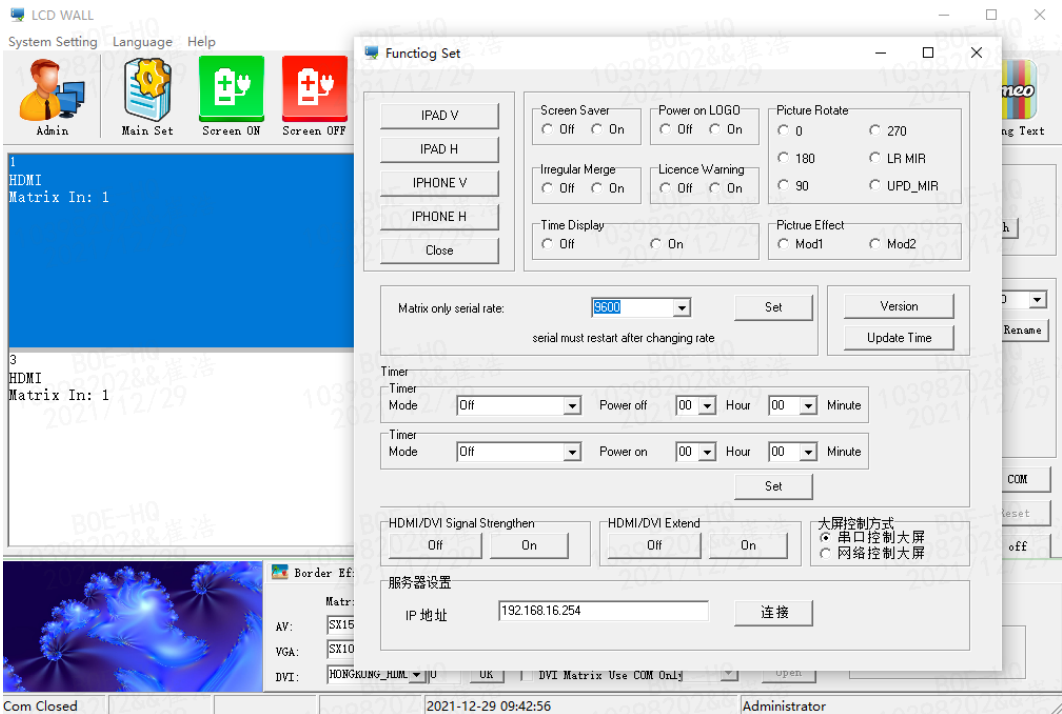


Fig. 24

3.12 Title Set

Click System Settings, and in the pop-up dialog box, click Title Set

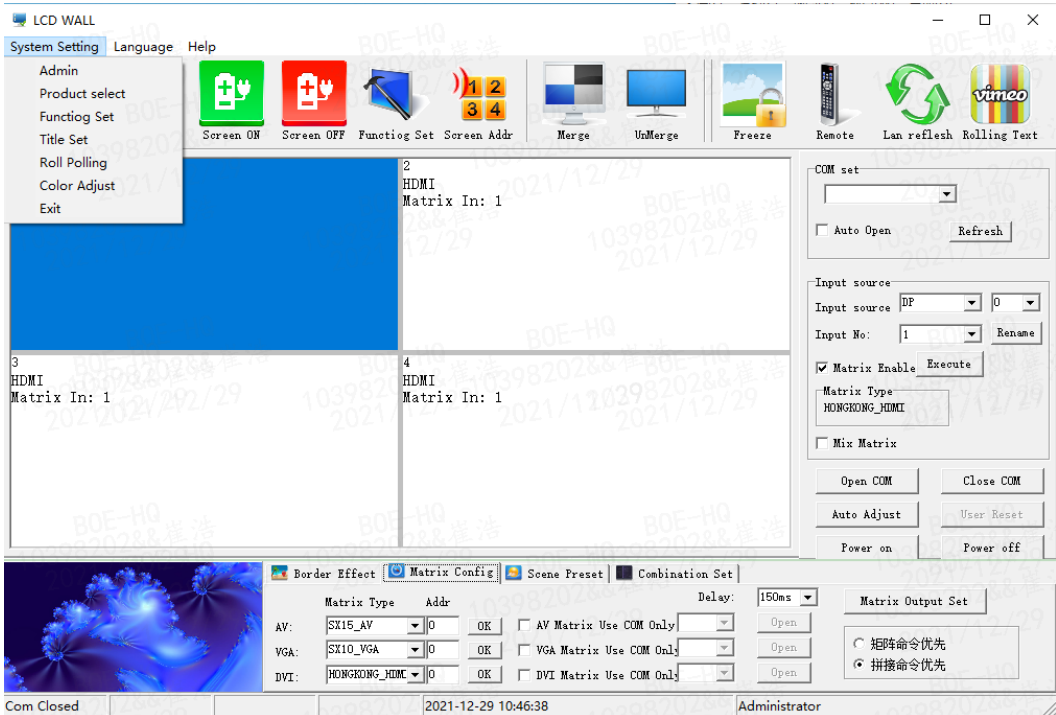


Fig. 25

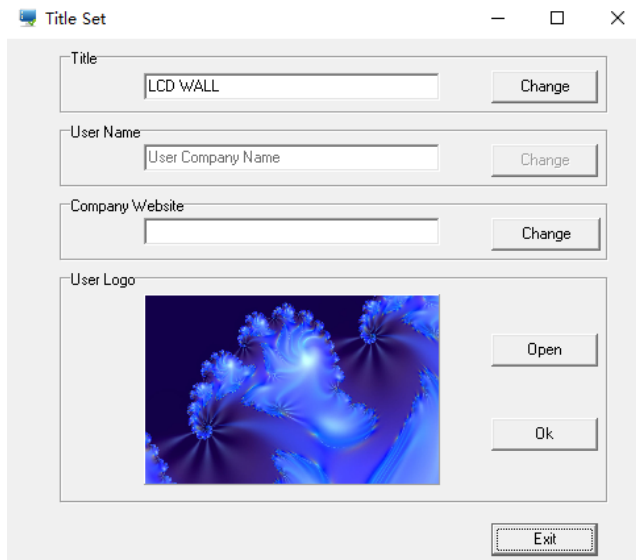


Fig. 26

- Title: Users can modify according to their own needs
- User name: Users can modify according to their own needs

- Company URL: Users can modify according to their own needs, can be changed to any desired URL
- User LOGO: User can modify any company LOGO here, then OK

Note:Open the control software click on the bottom left corner of the LOGO image area, according to the user has set up a LOGO, URL, etc. click Open it will be connected to the set URL

3.13 Language

Customers can choose Chinese or English

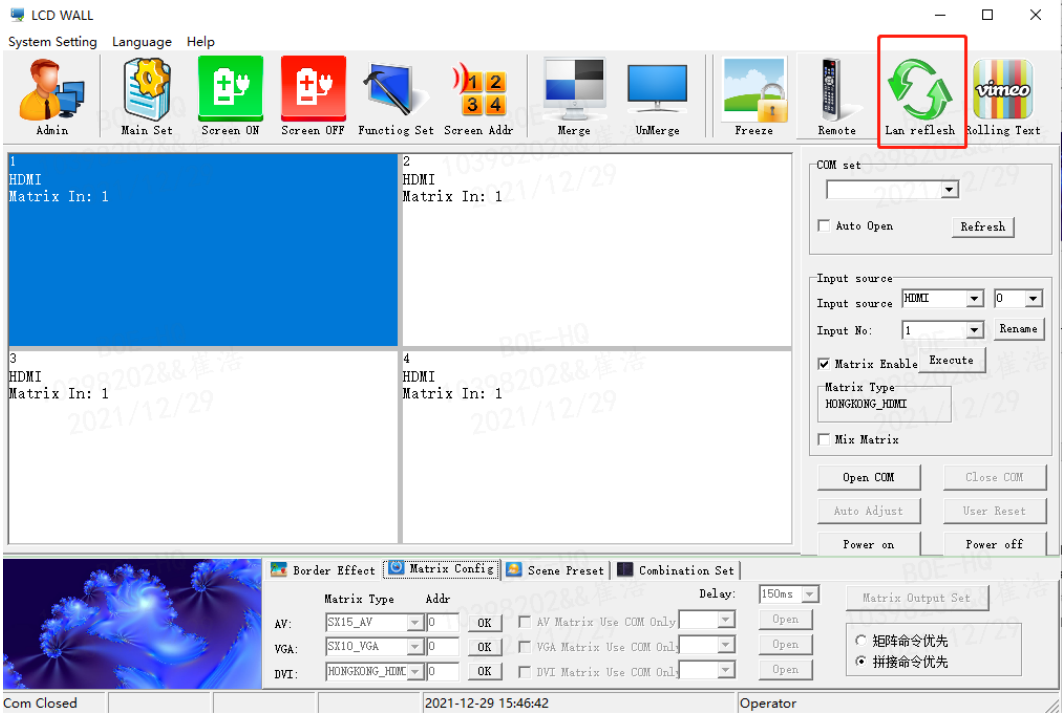


Fig. 27

4 RJ45 to interface line sequence

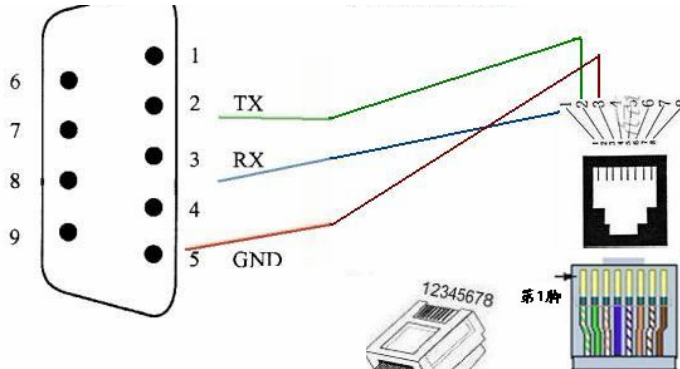


Fig. 28

5 Remote Controller

5.1 Remote Controller



Fig. 29

5.2 IR Receiver

IR Receiver have to be insert on the no. 1 screen of the daisy chain via RJ45 IN port, otherwise you have to insert to each screen one by one

5.3 Screen Address Setting

1. Press "MENU" on remote controller, below OSD will pop up:

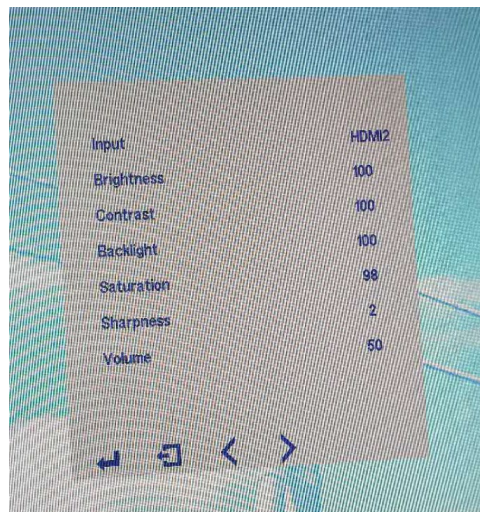


Fig. 30

Refer to input source in use, select "input". For example, if "HDMI2" is in use, just move to "input" by "up" and "down" button, set to "HDMI2" by "left" and "right" button, then press "MENU" to save changes.

2. Move to "MachineCode" page by "left" and "right" button on "MENU" OSD.

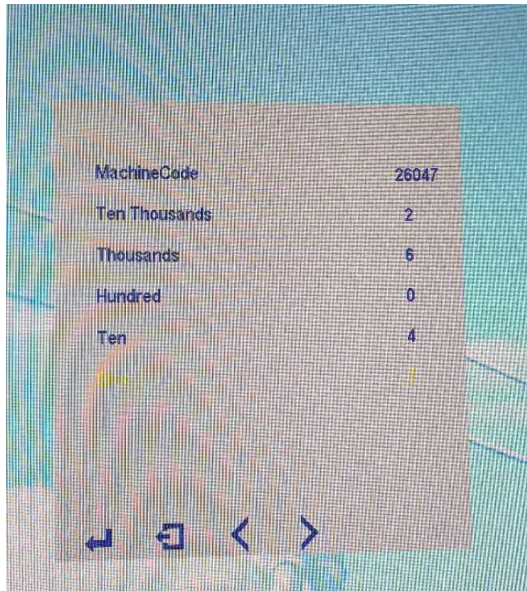


Fig. 31

Refer to the No. of "MachineCode", set "Ten Thousands", "Thousands", "Hundred", "Ten", "One", then press "MENU" to save changes.

3. Move to "video wall matrix setting" page by "left" and "right" button on "MENU" OSD.

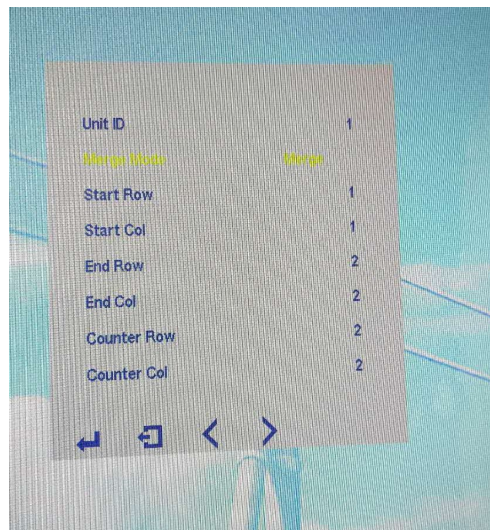


Fig. 32

Set video wall matrix setting. For example, if you want to set up 2x2 matrix, then set "Start Row" to "1", "Sart Col" to "1", "End Row" to "2", "End Col" to "2", "Counter Row" to "2", "Counter Col" to "2". "Unit ID" is current screen matrix location No., set "Unit ID" to corresponding No., then Set "Merge Mode" to "Merge", Press "MENU" to save changes. If you want to exit video wall matrix mode, then set "Merge Mode" to "Normal".