46inch 3.5mm LCD Video Wall Product Manual

Dear user,

Hello! Thank you for purchasing the products of Elite Board. We believe this new product will bring you infinite joy. Before using this product, please read the guide and keep it properly. The company shall not be liable for any accidents resulting from violation of the safety precautions and instructions in this manual.



There is high pressure in this product; the user must not open the shell without authorization. The non-maintenance personnel shall not repair or replace the parts without authorization for avoiding electric shock and fire accidents.



Please use clean and soft cotton cloth to clean and maintain the whole machine. It is prohibited to use hard objects to carve, knock, impact or rub the display with various abrasive objects. In the process of installation, placement and use, the product should avoid water drop and splash. In case of thunderstorm and other weather, the power plug and cable TV (or outdoor antenna) should be

unplugged quickly so as not to cause lightning damage.

This product is a kind of equipment(II Type) with no grounding.

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About this manual

This manual is used as a guide. The photos, pictures, charts and illustrations provided in the manual are only used for explanation. If there is any difference between the product and the specific product, please refer to the actual product. Elite Board may update this manual due to product version upgradation or other requirements. If you need the latest version of the manual, please check it on the company's official website (www.Elite Board.com)

Elite Board recommends that you use this manual under professional guidance.

Responsibility Statement

Within the scope of the maximum allowed by law, the product described in this manual (including its hardware, software, firmware, etc.) is provided in a way that is "in accordance with the status quo". So there could be flaws, errors or failures, and Elite Board won't provide any form of guarantee, including but not limited to such guarantee (marketability, satisfaction with the quality, suitable for a particular purpose and no infringement of third party rights, etc.). And Elite Board also will not compensate for any special, incidental, accidental or consequential damages arising from the use of this manual or the use of the company's products. This damage includes, but is not limited to, loss of business profit, loss of data or loss of documentation.

When using this product, please follow the applicable laws strictly. Elite Board shall not assume any liability if the product is used for infringement of third party rights or other improper uses. This manual is applicable to the following products:

Product Model
Y46LVW-P01 & Y46LVWD-3.5

Chapter 1 Introduction

The purpose of this section is to ensure that the user is able to use the product correctly through this manual to avoid any risk or loss of property in the operation. Before using this product, please read the product manual carefully and keep it for future reference.

Convention of symbols

For the symbols that appear in the document, the instructions are as follows:

Symbols	Instructions
Instructions	This is the description text, which indicates the complement and interpretation of the text.
Atten	This is the attention text, which means to remind users of important actions or to guard against potential damage and property loss.
War ning	This is the attention text, which warns users against potential death or serious injury risk.

Safety precautions



- In the process of product installation and use, all electrical requirements of the state and the use area must be strictly observed.
- Please use the power adapter provided by the regular manufacturer. Please refer to the product parameter list for the specific requirements of the power adapter.
- To reduce the risk of fire or electric shock, the product should not be exposed to rain or moisture.
- When installing wiring in a building, it should be embedded in easy-to-use power-off equipment.
- When the product is installed on the wall or ceiling, make sure the product is firmly fixed.
- If the product is not working properly, please contact the company.
- Do not disassemble or modify the product in any way. The company does not bear any responsibility for any unauthorized modification or maintenance.



- Avoid placing products in vibration or impact environments and away from electromagnetic interference.
 (ignoring this could damage the product)
- Do not touch the radiator parts directly, so as not to cause scalding.
- Indoor products should not be installed in the environment where water or other liquids may be sprayed.
- Do not use products in extreme heat, extreme cold, dust, corrosion or high humidity. Please refer to the product parameters table for specific temperature and humidity requirements.
- Avoid the heat accumulation, keep the surrounding ventilation smooth.
- Please keep all the original packaging materials of the product properly so that when problems occur, you
 can use the packing materials to wrap the product and then return to the manufacturer for maintenance.
 The user shall be responsible for the accidental damage caused by the non-original packing materials.

Chapter 2 Product Introduction

2.1 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.

2.2 Product Characteristics

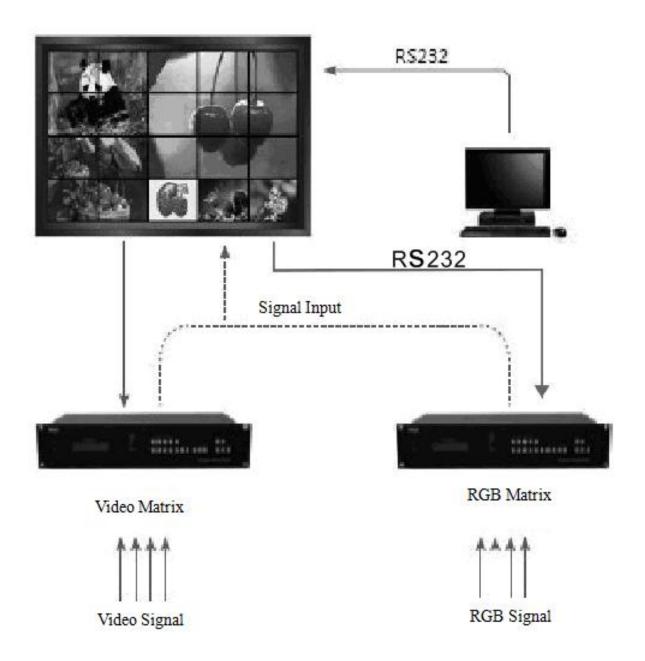
- (1) the product supports 4K input, and when clicking 4 pieces of 1920 Mosaic screen (3840x2160), the point-to-point display can be realized, which means that the display screen is not compressed, and the display effect is clear and realistic.
- (2) the product support DP loop through, as long as the 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);

- (3) the input signals support a 90-degree, 180-degree, 270 degree flip, and the rollover effect is excellent.
- (4) support machine code (address code), and the line address is easy to recognize, because the user only needs to fill in the control software;
- (5) it has the function of automatic signal detection. When the signal input is detected, it will automatically switch to the signal source.

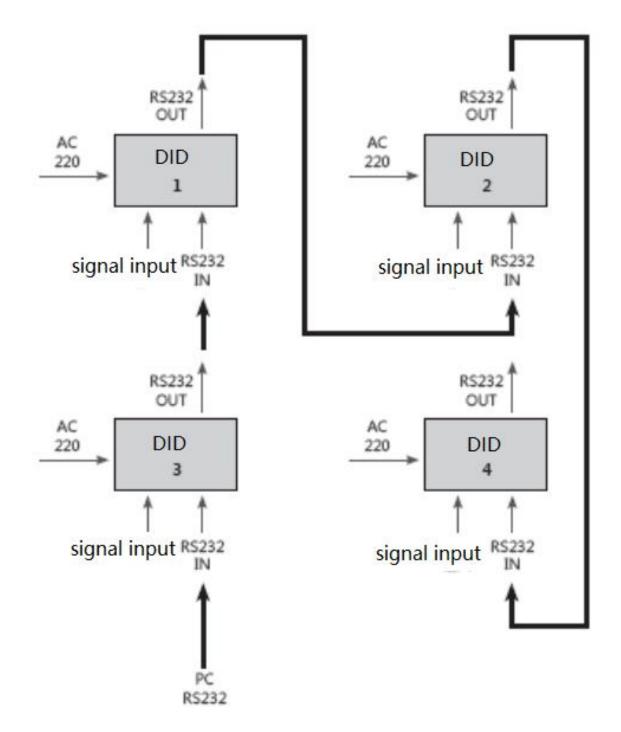
2.3 Technical Specifications

Overall dimensions	1022x576.6x102.9mm	
Net weight	20KGs	
Physical joint	3.5mm	
Display parameters		
Resolution	1920×1080	
Brightness	500cd/m ²	
Contrast (typical value)	1400;1(DCR)	
MTBF	30K hours	
Response time	8ms	
Visual angle	H 178° V 178°	
Color	16.7M	
Color gamut	72%	
Back light source		
Light source type	LED	
Light source life	30K hours	
Power supply		
Working voltage	100-240V 50/60Hz	
Rated power	<200W	
Working environment		
Working temperature	0 ~ 50°C	
Working humidity	20%-80% (without condensation)	

2.4 System Connection Mode



The structure of the system



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

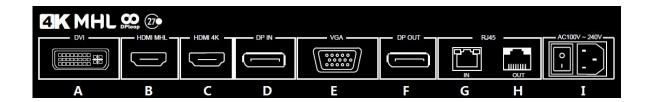
2.5 Common Fault Handling

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)	 Check whether the power line is damaged. Check whether the power supply is accessed to electricity. Verify that the power supply has been opened. Check whether the power switch is damaged. Check whether the insurance is fused.
All the splicing units are out of control	 Check whether the port settings of the splicing software are correct. Check whether there is a damage in the serial line, and whether it is a good connection between the product and the PC interface. Check whether there is a problem with the PC serial port, you can change another PC for testing. 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	 Check whether the address of the device are correctly set. Check whether can control a single unit separately.
No VGA/DVI input of single or multiple devices	 Check whether the interface betweenthe unit board and the signal source is well connected. Change another VGA/DVI line to test. Check whether the device is arranged in the corresponding input state. Check whether the input signal is beyond the scope of this product input. For DVI input, confirm the DDC capture and the output.

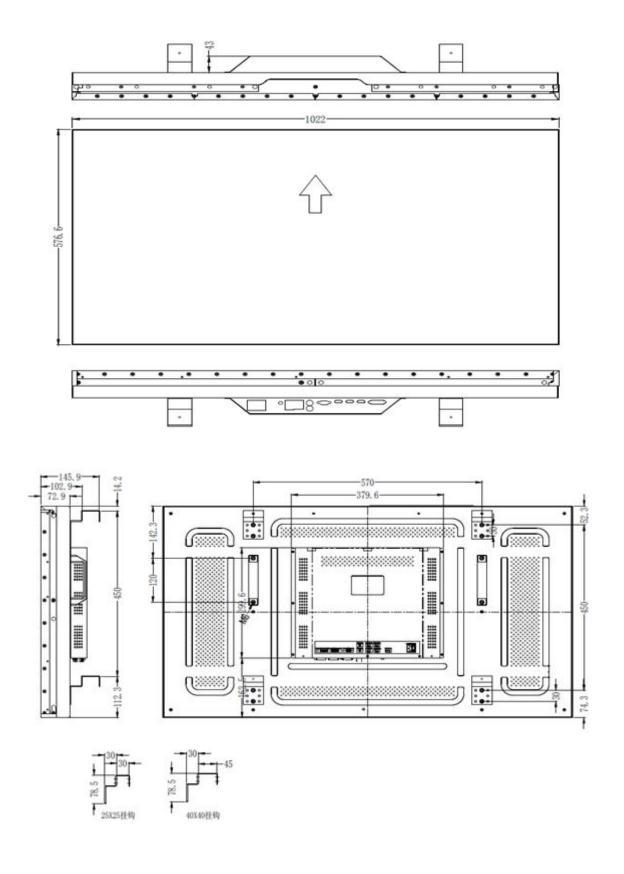
Chapter 3 Interface and Dimension

3.1. Interface Specification



No	Definition	Notes
A	DVIinput	DVIinterfaceinput,suppport1920x1080 60hz
В	HDMI MHLinput	HDMIdigital signalinput,suppport1920x1080 60hz
С	HDMI 4Kinput	HDMI digital signalinput,suppport3840x2160 60hz
D	DPinput	DP digital signalinput,suppport3840x2160 60hz
Е	VGA input	VGA analog signalinput,suppport1920x1080 60hz
F	DP output	DP digital signaloutput,suppport3840x2160 60hz
G	RS-232input (RJ45interface)	serial port input connects the control computer ,which adopts the standard of 568B
Н	RS-232looping-out (RJ45interface)	serial port looping-out controls B, which adopts the standard of 568B
I	220V power supply interface	220v AC input

3.2. Product dimensions



Chapter 4 The Control Software

PC control software installation and Application

The system running environment: 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

Starting the system

Before running the system, ensure the following normal connection:

- 1. The RS232 line of the computer for the software is properly connected to the controller.
- 2. 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: userlogo, 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.

4.1. Settings of the software:

Click the function diagram of "serial port settings", the interface is shown as in Fig. 2.

Note: Click "refresh" button to mate COM automatically, and then click "open" to achieve connection.

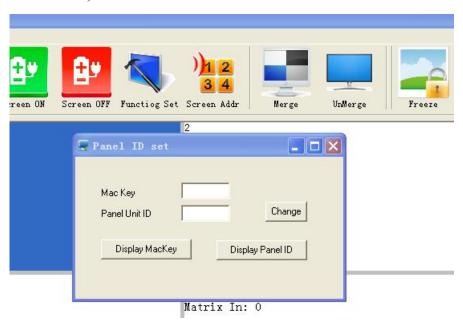


Fig. 2

The ranks in the "curtain wall settings" can be set according to the actual needs. The following is an example of 2 by 2 in the WinXP (Note: if the wall is 2 by 2, then the splicing array must be set to 2 by 2, otherwise it will fail to splice)

4.2. Address settings for the splicing controller (settingID)

System settings ---- sequence number (setting ID) changes: each equipment's original serial number is "1", the users can set the screen sequences according to their own needs. Administrator users can go into the "curtain wall settings" to fill in the corresponding target sequence numbers according to each screen machine's code, then click "modify" to complete modification of the serial number of the screens (Note: this function will read the screen machine's code and modify the corresponding serial number of the screens when modification). (Note: the "system settings" button can only be operated when inputting the administrator password. The remote controller can only be used in the multimedia channel. The default administrator password is 111111, which can be modified. Please keep the new password in mind when modified)



4.3. Single machine operation:

Fig. 4 is showing the relative options

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

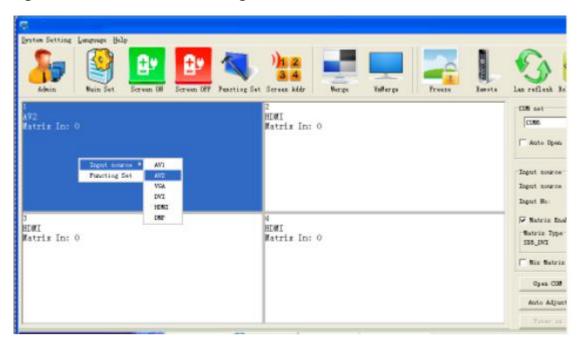
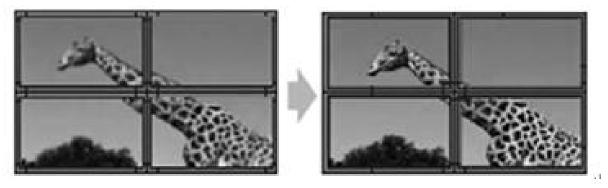


Fig. 4

4.4. Splicing operation

Splicing operation is as shown in Fig. 5. 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.

After splicing, 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(Note: the frame value is set according to the physical frame of the screen. For example: the length of the LTI460HA03 frame is 10mm, and the value should be set to10). Fig. 5 shows the effect of removing frames.



This function of removing frames is not used.

This function of removing frames is used.

Fig. 5

4.5. Large-size screen splicing and signal source selection:



or select signal source, and click quick



4.6. Matrix linkage

1). Select: Matrix linkage, and select the matrix input channel



2). Select the matrix type and configure the matrix ID (Note: different matrix selection has the different time delay)

Bor	der Effect 🧧	Matrix 0	Config	🛂 Scene Preset 🛮	Combination	Set			
	Matrix Type	Addr							
AV:	SX6_AV	▼ 0	OK	AV Matrix Use	COM Only COM6	_	Open	Matrix	Output Set
VGA:	SX6_VGA	▼ 0	OK	☐ VGA Matrix Us	e COM OnlyCOM6	-	Open		50ms ▼
DVI:	SX6_DVI	▼ 0	OK	DVI Matrix Us	e COM OnlyCOM6	_	Open	Delay:	Jours 🛨

4.7. Scene default

The scene default is shown in Fig. 6.

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

😓 Scene Preset	
Scene Select Scene Select scene1 Rename Load Scene Save Scene	Scene Roll Polling Scene Select scene1 scene5 scene9 scene13 scene14 scene2 scene6 scene10 scene14 scene3 scene7 scene11 scene15 scene4 scene8 scene12 scene16
	Interval(>5s) 5 Use Matrix Scene Roll Polling Enabled
3	Scene Roll Polling Enabled Save Exit

Fig. 6

4.8. System settings

Click system settings, see Fig.7.

(Note: only the administrator can access the settings, password: 111111)

In this menu, the two options of Video and VGA are set by different signal sources; and each of

the settingsin the splicing unit willdisplay correspondingly.

1). Color adjustment

The buttons of "brightness", "contrast", "chrominance", "could", "tone", "one key color correction" can be adjusted when selecting Video.

When choose VGA, you can only adjust the "brightness", "contrast", and "one key color correction" buttons. See Fig. 7.

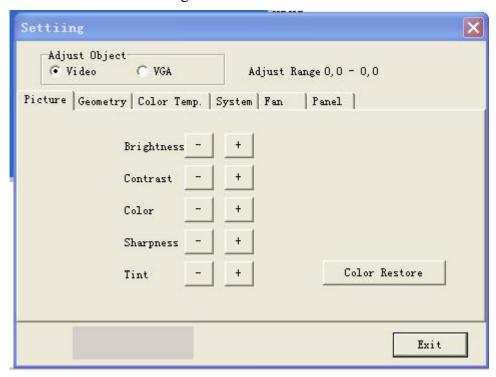
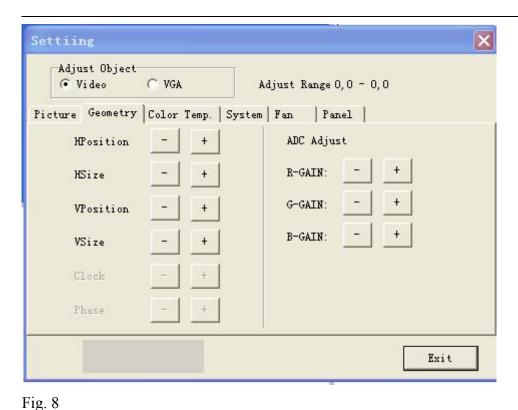


Fig. 7

2). Geometry adjustment:

When choose the Video, you can adjust the "horizontal position/size" and "vertical position/size". When choose VGA, the "clock", "phase", "horizontal position" and "vertical position" can be adjusted. See Fig.8.



3). Color temperature adjustment:

When choose Video/VGA, you can adjust the colors of red, green and blue. See Fig. 9.

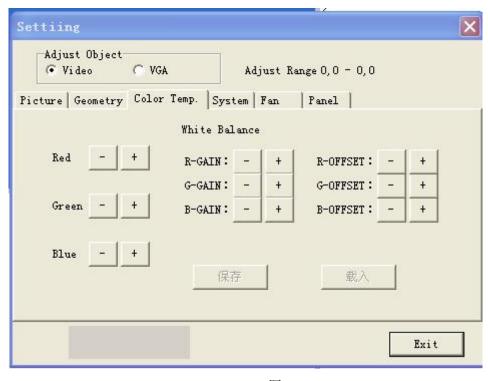


图 9

4). System adjustment

In this menu, you can adjust solidified software on the machine, including the backlight brightness adjustment, the no-signal blue/black mode, the software upgrade, and the automatic adjustment function the VGA location/color. See Fig. 10.

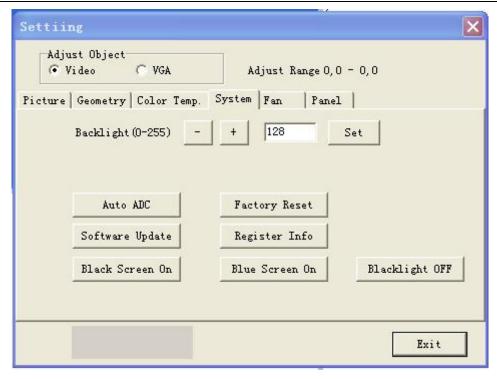


Fig.10

Terms interpretation:

Backlight brightness: it is used to adjust the brightness of LCD lamp, and has nothing to do with signals.

Automatic adjustment of the VAG color: if the value is caught incorrectly in the VGA state, the display color is not normal. Now you can click this button to catch it again, it can be repeatedly clicked (Note: it is used when single screen display of the splicing unit).

No-signal blue screen: when you click on this button, the no-signal blue mode is on. If there is no signal, the screen displays blue. When signal is connected, it will display normally.

No-signal black screen: when you click on this button, the no-signal black mode is on. If there is no signal, the screen displays black. When signal is connected, it will display normally(Note: this function is practical in some special occasions such as at night time).

Reset: you can click this button to restore the machine to original state when your settings are in chaos (Note: do not reset unless you get the permission from the manufacturer)

Changeof the curtain address (i.e. splicing control box address): all the splicing control boxes addresses are originally set to "1", the users can set the addresses according to their own needs. Firstly to display the screen machine codes, as shown in the bottom of the screen (see Fig.11 and Fig.12), then set the corresponding addresses, click "modify" to complete the changes.



Fig. 11 Machine code

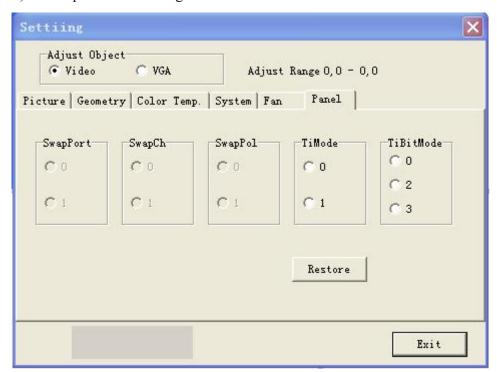
Fig. 12 Machine code and screen address

6). Fill the machine code and the screen address displayed in the control software into the corresponding boxes and then click "modify" to finish it. All the default addresses of the display screen are "001".

For example, in the 2 by 2 splicing screen, the machine code 15569 is showing for the fourth screen counted from left to right by column, as shown in Figure 11. When you put the 15569 into the frame, the address box of the curtain wall has been changed into 4, click "modify" to finish it, and then close it to go on for the next one.

Software upgrade: copy the software MERGE.bin from the relevant personnel of our company to the root directoryof a USB drive, do not change the file's name, then insert the USB drive into the USB interface, click "software upgrade", the screen will turn into blue, and you can see the update progress of the software in the upper right corner. At the same time, the power indicator light will flash green/orangealternately. It will automatically reboot after the upgrade is completed (Note: during the upgrade process, do not power off or pullout the USB drive, otherwise it will damage the machine).

7)Screen parameter settings



8). System

(1). Click administrator

This operation software needs administrator's privilege in many places, as is shown in Fig. 15 and Fig. 16.

The administrator password: 111111



Fig. 15 Fig.16

(2). Software settings: click software settings, as shown in Fig. 17



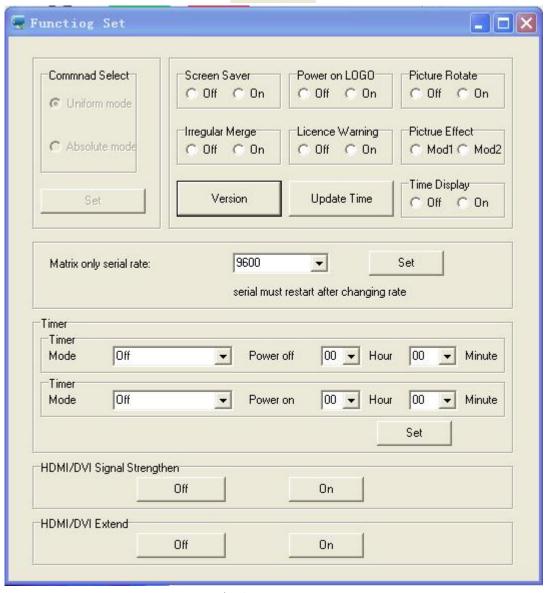


Fig. 17

- (3) . Title settings: click "system" to open the "title settings" as shown in Fig. 18.
- Title: the users can modify it according to their own needs.

- User's name: users can modify it according to their own needs.
- ◆ Company website: users can modify it according to their own needs, which can be changed into any desired one.
- ◆ User LOGO: users can modify any company LOGO, and then determine it.

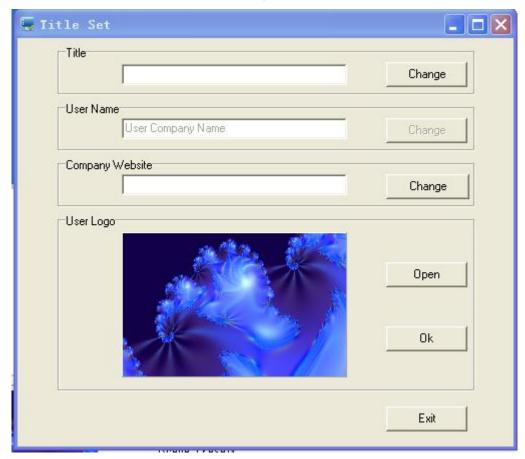


Fig. 18

◆ Open the control software, click the LOGO picture zone at the lower left corner, it can link to the website as the user designated. See Fig. 20.

(Note: the computer has shown normal connection of the network)



Fig. 19

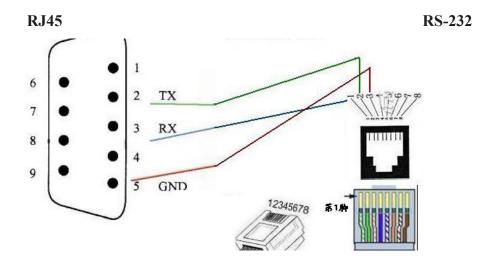
◆ Language: users can choose Chinese and English according to their own needs.



◆ Registration: click "registration"



Chapter 5 Line Order of RJ45 Transfer Interface



Chapter 6 Packaging list

No.	Product name	Unit	Quantity	
1	Whole machine	/	1	
2	Power cord / 1		1	
3	Ethernet cable	/	1	
4	Hook	/	4	
5	Remote control	/	(optional)	
6	RS232 connector	/	(optional)	
7	Infrared reception	/	(optional)	
8	Adjusting screw	/	8	
9	Hook screw	/	8	

Restricted substances or element identification tables

A restricted substance or element identification form specified in the "administrative measures

for controlling the pollution of electronic information products"



	Restricted substances or elements					
Part names	Lead (Pb)	Mercu ry (Hg)	Cadmium (Cd)	Hexaval ent chromium (CrVI)	Polybromin ated biphenyls (PBB)	Polybromodi phenyl ether (PBDE)
Metal parts	×	О	О	О	О	O
Plastic parts	О	О	О	О	О	O
Circuit board	×	О	0	О	О	О
Glass (if any)	0	О	0	О	О	0
Power supply (if any)	×	0	0	0	О	О
Attachm ent (if any)	×	0	О	О	О	О

Instructions:

- 1. O indicates that the content of the restricted substances in all homogeneous materials in the component is below the limit specified in SJ/T 11363-2006;
- 2.×indicates that the content of the limiting substance exceeds the limited requirements specified in SJ/T 11363-2006 for at least one homogeneous material of the component;

Warranty service

Dear user:

Thank you for choosing this product. In order to enable you to fully enjoy the perfect after-sales service support, please read the instructions of the warranty card carefully and keep it properly after purchase.

- 1. With this card, you can enjoy the free warranty within the warranty period and the preferential service outside the warranty period.
 - 2. The warranty period shall be one year from the date of purchase.
 - 3. Product failures caused by the following situations are not covered by warranty:

The user cannot show the valid warranty certificate and the valid invoice;

Improper use of the environment or improper use conditions, such as failure of the product due to power failure, ambient temperature, humidity, lightning strike, etc;

Product failure due to accident, negligence, disaster, improper operation or incorrect operation;

Failure or damage caused by the installation, repair, alteration or disassembly of the maintenance personnel of the non-authorized agency of the company;

The product exceeds the warranty period stipulated by the company.

User name:
Detailed address:
Telephone:
Fax:
Zip code:
E - mail:
Product Model:
Product sequence number (S/N):
Production date: year month day.
Purchase date: year month day.

If you have other requirements, please fill in below: