

X3 Quick Start



- Scalable videowall processing for large videowall with up to 8 displays or more
- Card frame videowall processing system available with 6 slots
- Integrates easily into a diverse array of 4K environment such as lobbies and simulation
- High speed, dedicated video/graphic bus delivers real-time performance, each channel up to 4.25 Gbps
- Seamless switching between the inputs and display windows or layers
- Multiple cascade to create un-limit real time display resolution
- Upload and display stored images
- Output max supports 16 layers operation, and single output max supports 4 layers

CONTENT

Product Introduction	1
Packing Configuration	2
Hardware Orientation	3
Front Panel	3
Back Panel	4
Menu Orientation	5
Software Operation	6
Software Installation	6
Software Operation	9
Software Operation	9
Connect	9
Disconnect	11
Layout	11
Operating Mode	13
Basic Operation	14
Layer Settings	14
Input/Output Settings	15
Signals Merger	18
Data Management	19
Other	20
Other	22
Power	22
Bank	23
Factory Settings	23
User Settings	24
Others	25

Control Interface	26
Grab/Display Logo	28
Modify the Name	29
Set	29
IP Set	29
Hot Backup	30
Time-lapse Recall	30
Language	31
Help	31
Information Toolbar	31
Product Application	32
Command and Control Wall Splicing System	32
Security and Surveillance Wall Splicing System	33
Executive Conference Room	34
Contact Information	35

Product Introduction

The X3 is an HDCP-compliant, scalable, expandable videowall processor configurable to support a variety of inputs, outputs and windowing capabilities. It features high performance video scaling capable of producing very high quality images.

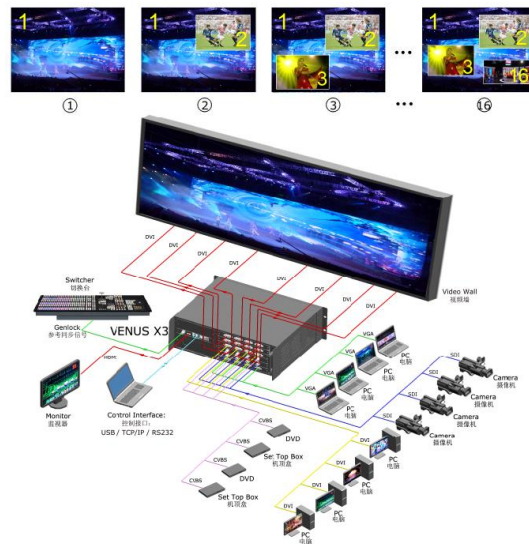
The X3 offers six card cages that support various combinations of input and output cards for 3G-SDI, HDMI, DVI, VGA, CVBS and USB (for media files play) or video sources. Hundreds of additional video or graphic sources can be input to the X3 using the RGBlink AVDXP Matrix and Router. Multiple X3 can be cascaded to

create very large display arrays.

A dedicated, high-speed video/graphic bus maintains real-time performance even under heavy loading of inputs. Compared with other videowall processors, the X3 extends two main important performance for presentation application. One is seamless switching between the inputs, and the other comes with local control panel option. These advantages make the X3 ideal for all types of surveillance, presentation, and visualization applications, whether traffic, security, military, or process control.

System Connection

RGBlink offers solutions to demanding technical problems. Any application questions, or required further information, please contact with our customer Support Engineers.



X3 System Connection Diagram

Packing Configuration

Power Cord



USB Cable



Network Cable



**DB9 to RJ11
Cable**



DVI Cable



SDI Cable



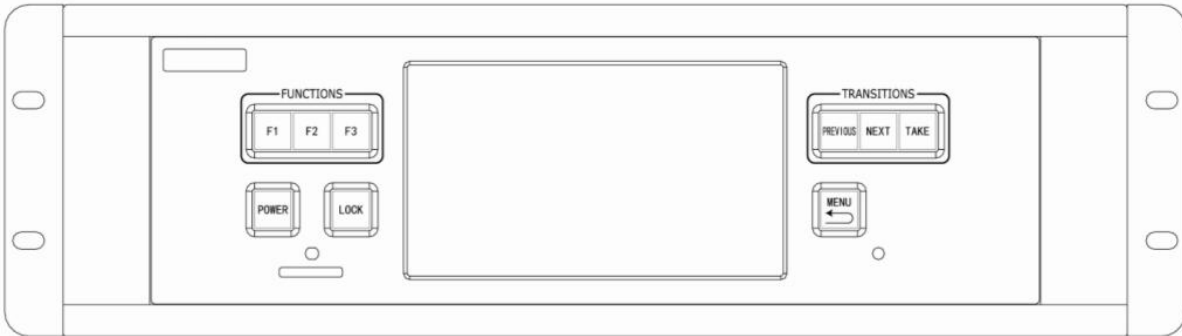
Antistatic Bag



Note: Chinese Standard, American Standard or European Standard power cord is option.

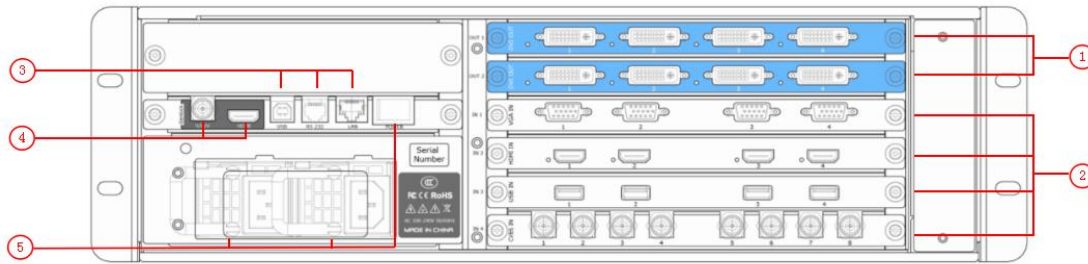
Hardware Orientation

Front Panel



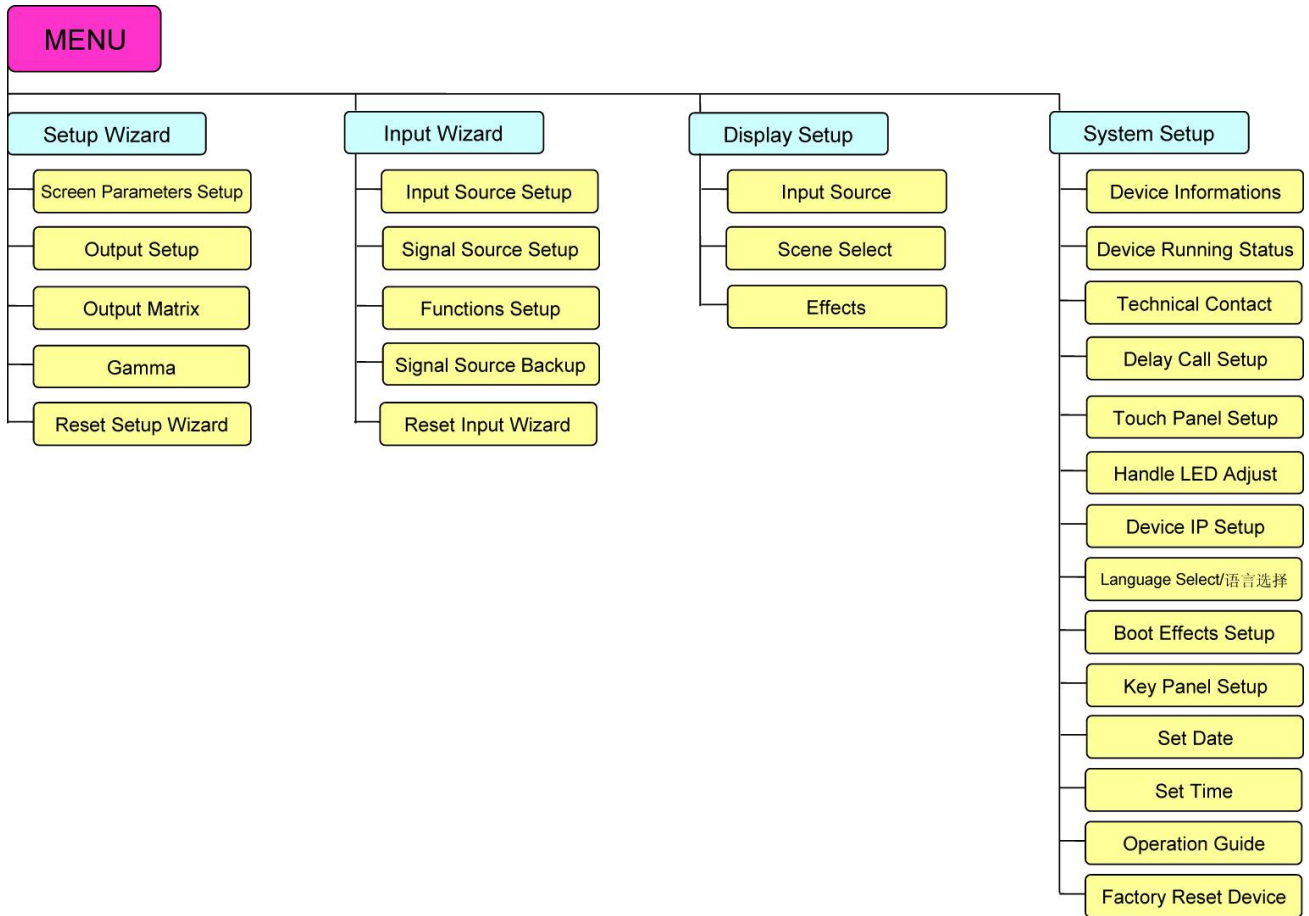
Button Instruction			
F1~F3	Custom function button	NEXT	Move next scene button
POWER	Power button	TAKE	Seamless effect switch button
LOCK	Lock front panel button	MENU	Menu and back button
SD Card	SD card insert port	Touch Screen Operation Panel	Support the function menu displaying and the touch operating, except the preview outputs.
PREVIOUS	Move previous scene button		

Back Panel



Chassis Module Structure			
1	2 output card slots, support DVI, VGA, HDMI and SDI optional module	4	GENLOCK interface
2	4 input card slots, support DVI, VGA, HDMI, USB, CVBS, S-HDMI, S-SDI, Dual Link DVI and SDI optional module	5	Power module and switch
3	Control interface		

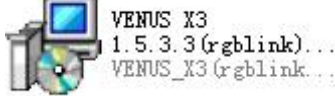
Menu Orientation



Software Operation

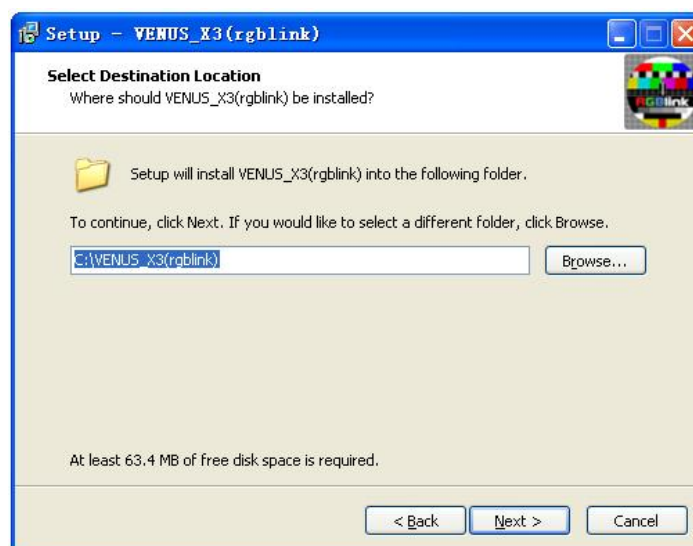
Software Installation

X3 video processor is very easy to configure with user friendly communication software, support drag and drop operation for edit and display.

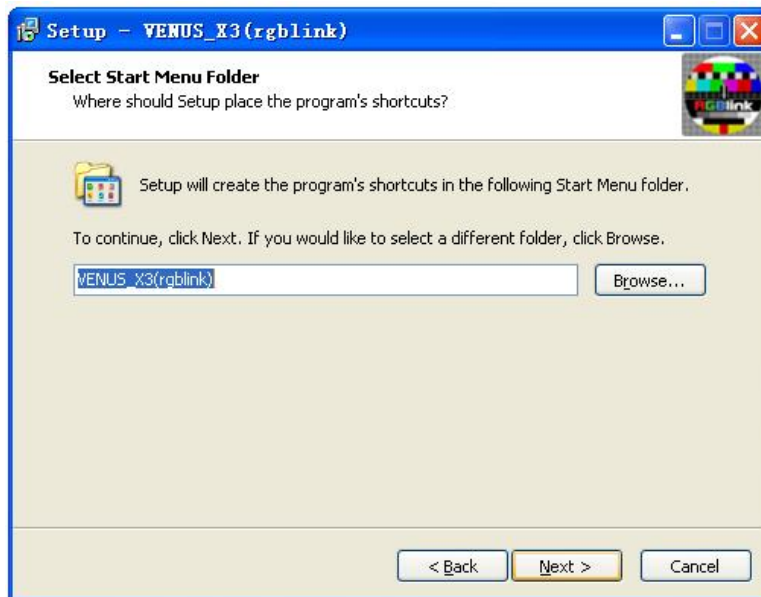
Double click  to install, system default English version, click "Next" to next dialog:



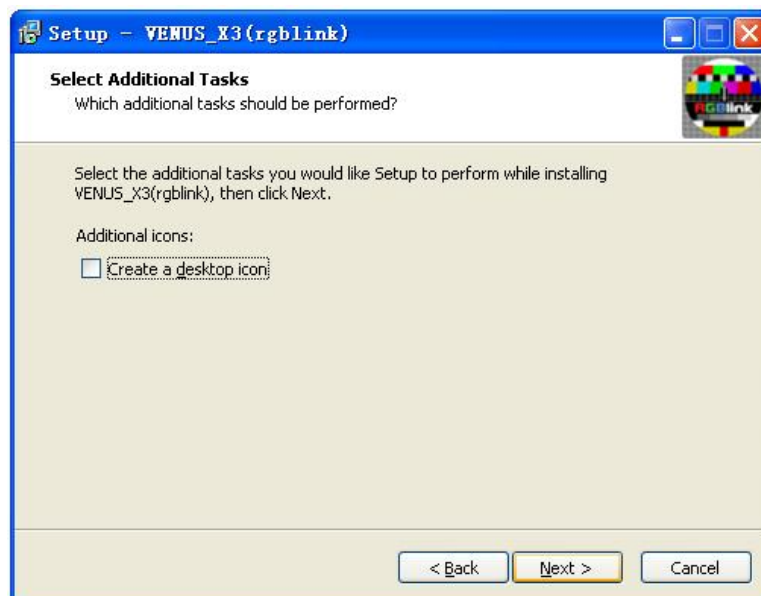
User can select "Browse..." to choose the X3 software install path.



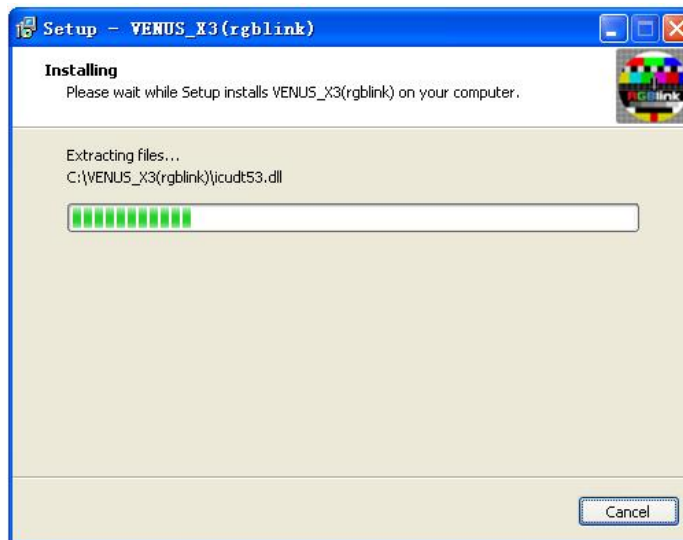
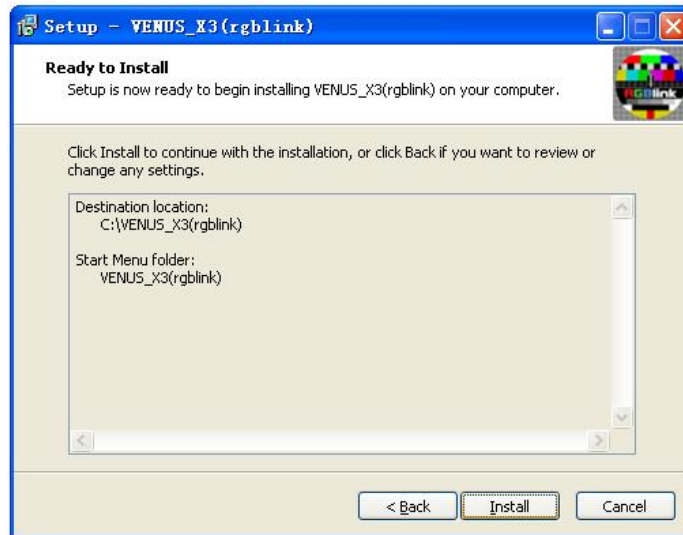
Click "Next" to go on:



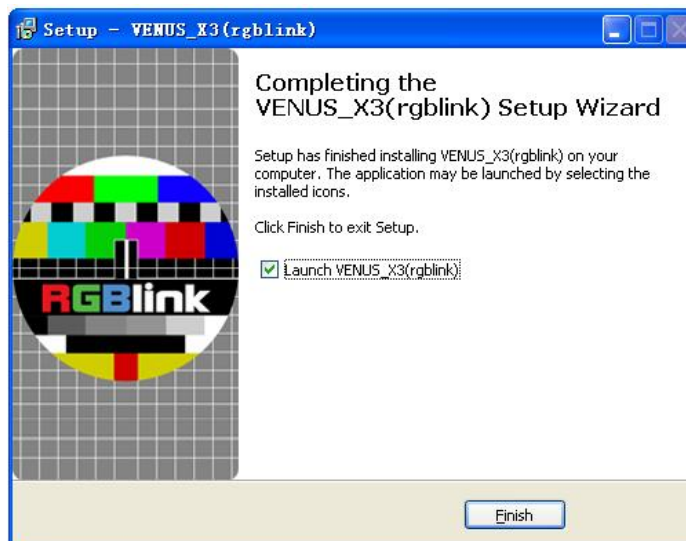
Click "Next" to go on:



Click "Install" to go on:



Click "Finish" and ready to run X3 windows control program.



Software Operation

Software Operation

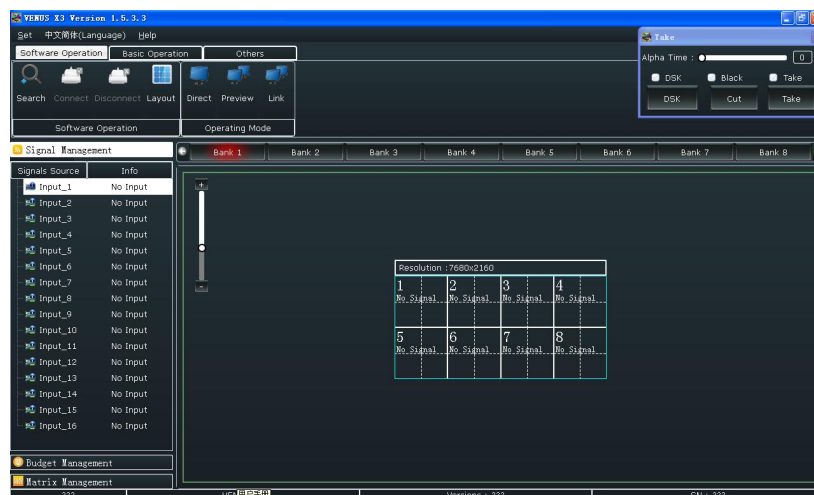
Connect



Double click the icon **VENUS_X3...** on the desktop. Log in interface will be enter after opening, the user's name is admin, and there is no pass word, enter into the software by clicking "confirm".



X3 communication software interface is shown as follows:



First, connect the X3 to the computer with the network cable, serial cable or USB cable, and open the device.

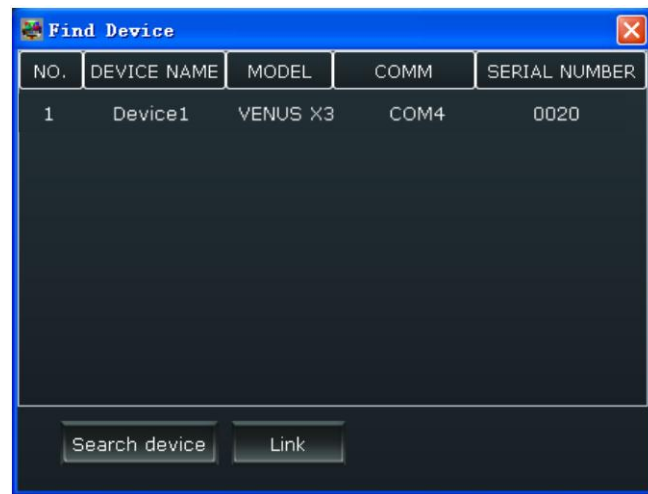
Then, choose "Search" below "Software Operation".



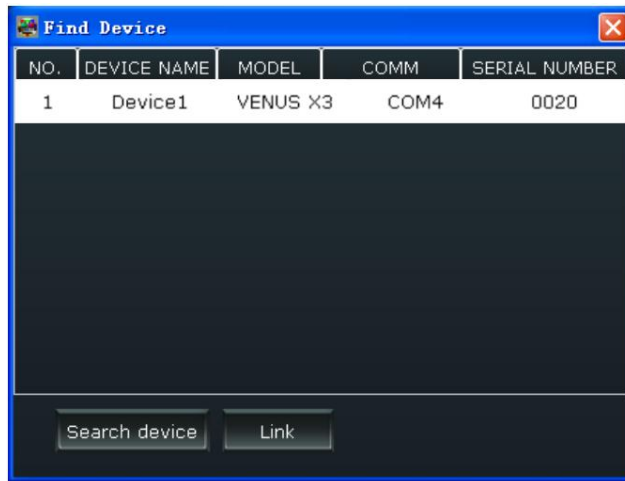
Enter to the software interface as below:



Then click "Search Device", and enter to the software interface as below:

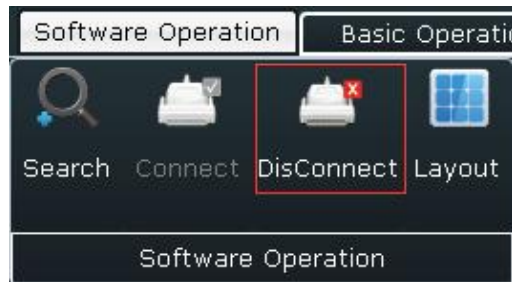


Finally, choose device name, as shown below, then click "Link", and finish connecting.



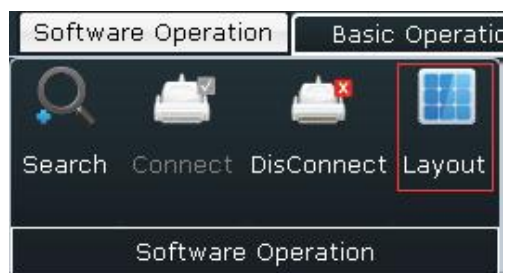
Disconnect

Click the shortcut key “Disconnect” below “Software Operation” to disconnect the device.

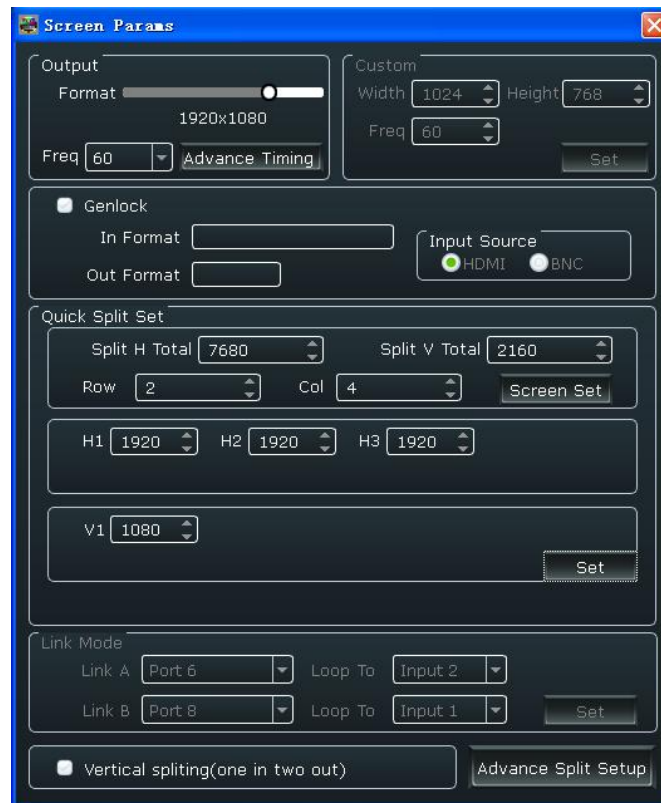


Layout

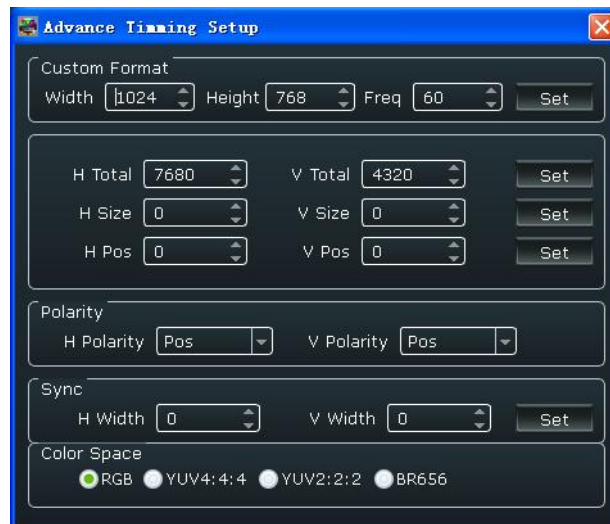
Double click the shortcut key “Layout” below “Software Operation”.



Enter to the software interface as below:



Output: Choose the output format according to actual need. “Advance Timing” can change various parameter value of output screen, click “Set” after changing. The software interface is shown as follows:



Custom: If choose “Custom” in Output, user can set custom resolution.

Genlock: Choose the genlock format.

Input Source: Choose input source HDMI or BNC.

Quick Split Set: Set the split H total, split V total, row and column, the output screen support max 2 rows and 4 columns, user can set the width and height of the output screen.

Link Mode: The link mode can achieve 5 pictures to 5 pictures seamless switching. It needs to connect output 6 and output 8 to the corresponding DVI inputs with two DVI cables, system default input 1 and input 2, then choose “port 6” Loop To “Input 1”, “port 8” Loop To “Input 2” in the screen params window of the windows control program.

Vertical splitting (one in two out): It is mainly for doing vertical split with dual graphics cards computer.

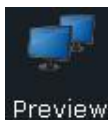
Advance Split Setup: Choose the port, and set X, Y, Width, Height and Rotate.



Operating Mode



Direct: Output the signal to LED display.



Preview: Output the signal to the monitor, click “Take” or “Cut” in “Take” box to seamless switch the signal to LED display. If select “Take Out” or “Black”, the preview image will seamless switch or black to LED display instantaneously.

System default outputs 2.4.6.8 as preview channel and outputs 1.3.5.7 as program channel.




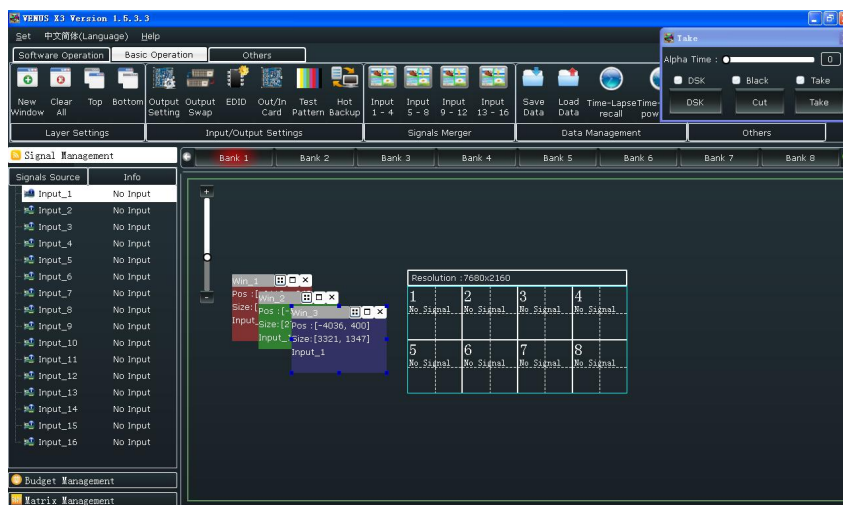
Link: The link mode can achieve 5 pictures to 5 pictures seamless switching. It needs to connect output 6 and output 8 to the corresponding DVI inputs with two DVI cables, system default input 1 and input 2, then choose “port 6” Loop To “Input 1”, “port 8” Loop To “Input 2” in the screen params window of the windows control program.

Basic Operation

Layer Settings

New Window: In output screen zone of controlling software, press the left mouse key and drag on the intended output screen to cover the whole current screen. And the below interface will be displayed. A window can be opened by click the shortcut key of “New

Window” , or double click the left signal source to be shown on the window.



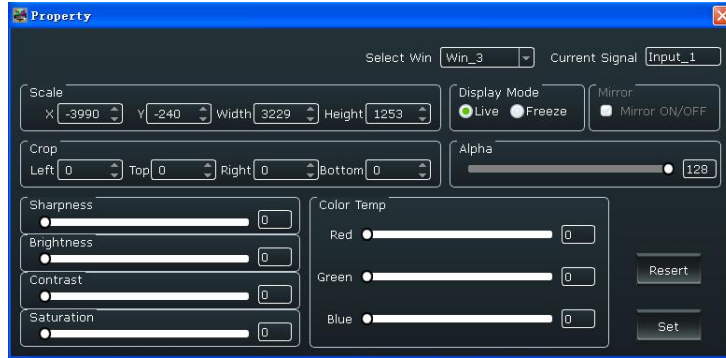
Paste Layer: Put the mouse on the window to be copied, right click the mouse, select “Copy Layer”, then right click in output screen zone of controlling software, and select “paste Layer”.



Adjust Window: Two ways can change the size and location of the opened window:


a. Drag and drop the opened window by mouse. The details are: move the mouse to the lower right brink of the opened window, when the mouse shows “<—>”, press the left key of the mouse and drag the window to a suitable size and then release the mouse. Move the mouse to the opened window and press the left key of the mouse and move the mouse, then the window will be moved, release the mouse when moved to the suitable location. But this method can only adjust the size and location roughly, if an accurate adjustment is needed, the second method can be used.


b. Put the mouse on the window to be adjusted, right click the mouse. Select the “Property”

and the exemplary interface will appear, adjust precisely by “X”, “Y”, “Width” and “Height”.





Full or Close Window: Click the icon “” at the upper right corner to full cell and click the icon “” at the upper right corner to full screen. Or put the mouse on the window to be adjusted, right click the mouse, select the “Full Cell” or “Full Screen”.

When a window needs to be closed, click the icon “” at the upper right corner, Or put the mouse on the window to be closed, right click the mouse, select the “Close”. If all windows

need to be closed, click the shortcut key “”, or put the mouse on any window, right click the mouse, select the “Close All”.

Hierarchical relations between windows: After creating the windows, the hierarchical

relations can be changed by the following: click the shortcut key “” or “”. Or put the mouse on the window to be adjusted, right click the mouse, select the “Bring layer to Front”, “Send layer to Back”, “Layer Forward” or “Layer Backward”, the window can also be set as back ground.

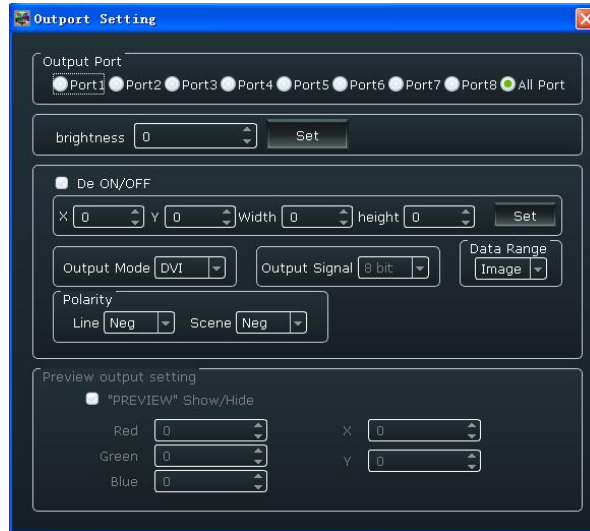
Input/Output Settings



OutPort Set: Out Port Set, user can choose one port or choose all ports and set the DE. X, Y, Width, Height, and choose output mode, output signal, data range and polarity.

The “Preview output setting” is valid in preview mode. User can choose show or hide the

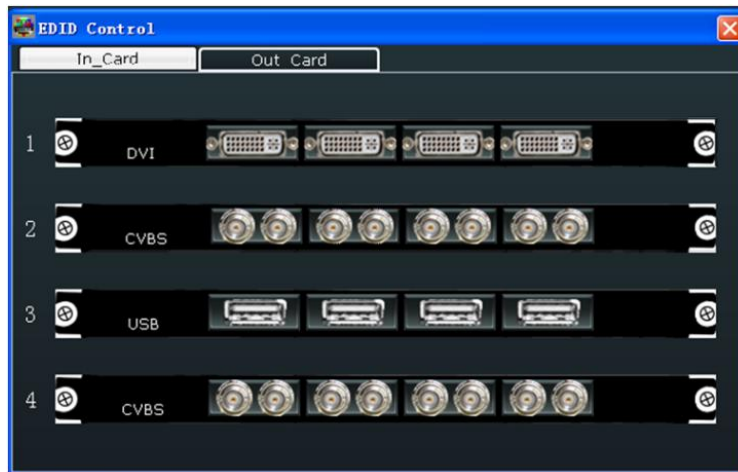
preview text, red, green, blue is the color of the text, and X, Y is the position of the text.



OutPort Swap: Click the Out Port Swap shortcut key, or put the mouse on the output to be adjusted, right click the mouse, select “Out port Swap” to swap the out ports.



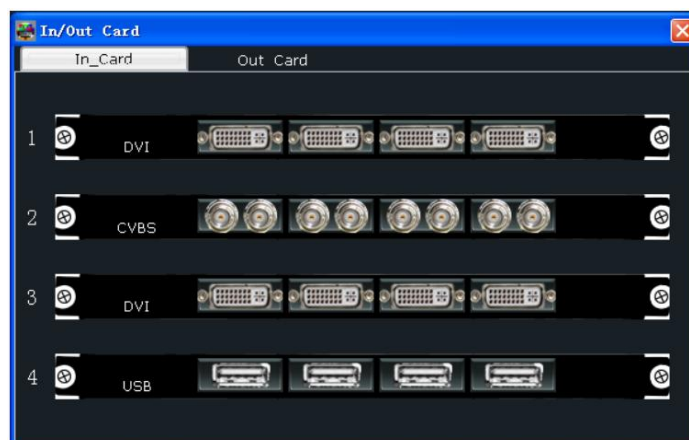
EDID: The special display project or LED display application would like to require special resolution settings to meet the requirement. The interface is as follows:



Choose In_Card or Out Card, and click any input port to read or write EDID.

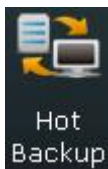
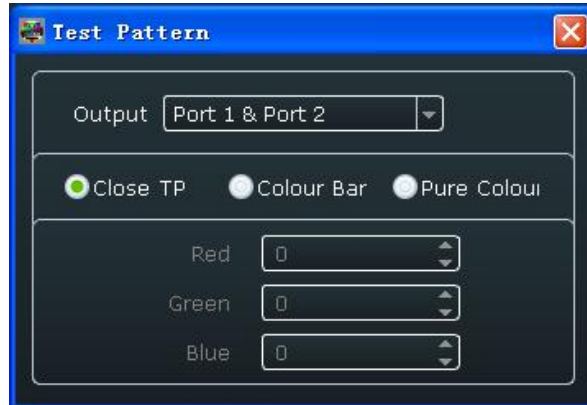


Out/In Card : Show the information of input or output card.

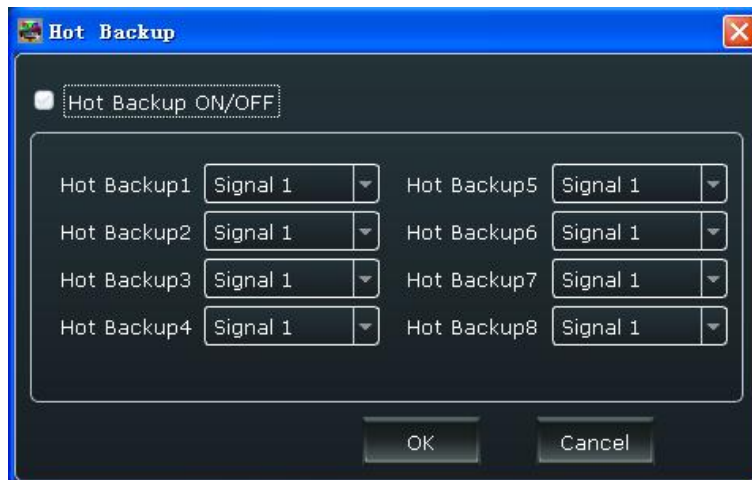




User can open or close the TP function, choose the output port, and choose color bar or pure color. User need to set the red, green and blue value if choose pure color.

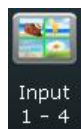


User can enable or disable the hot backup function. Choose “ON” to set the backup signal for Hot Backup 1 to Hot Backup 8. It will switch to the backup signal if interrupt signal.



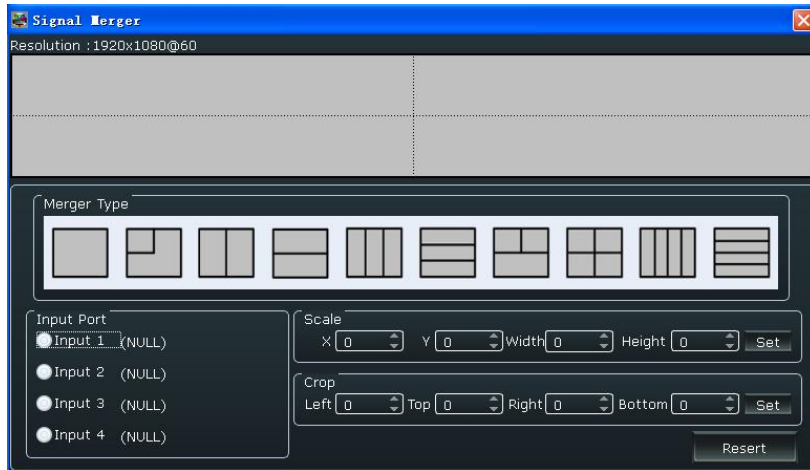
Signals Merger

The DVI and S-HDMI input optional module support signal merger. Click any input port, for



example, click **Input 1 - 4**, and the below interface will be displayed, choose the merger mode and input port, and scale and crop the size. If image quality distorts by improper operation,

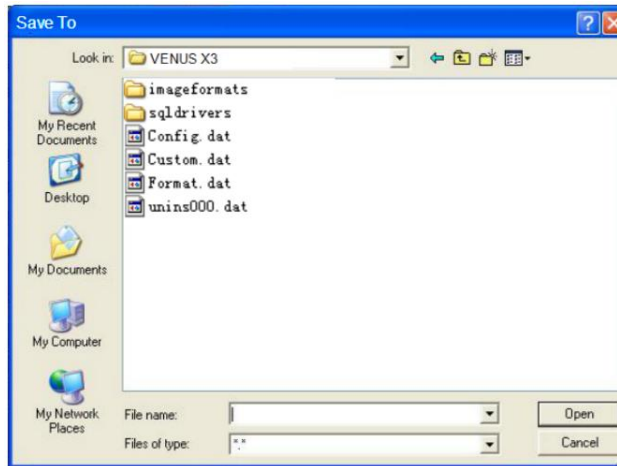
it can be recover by reset.



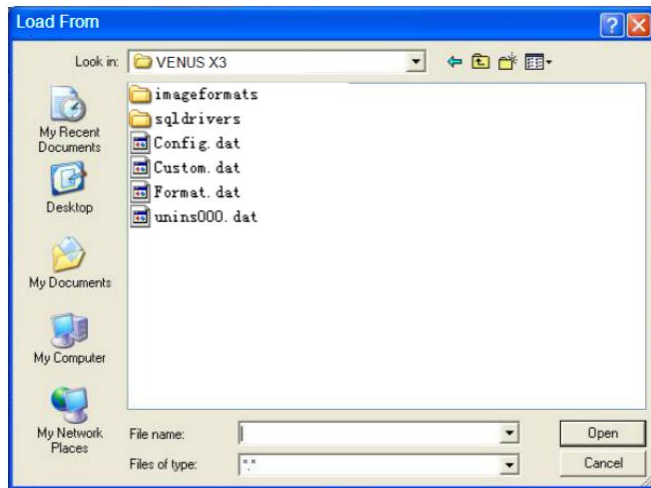
Data Management



Save Data: Save the data to the computer hard drive.



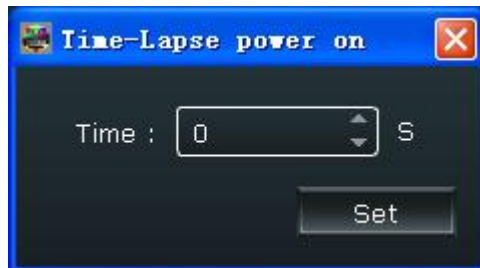
Load Data: Load the data from the computer.



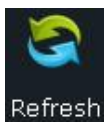
Time-Lapse recall: Set the time-lapse recall time, and choose the bank that will load.



Time-Lapse power on: Set the time-lapse power on time.



Other



Refresh: Refresh the current page.

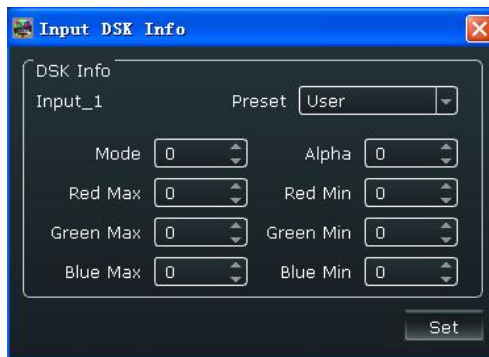


: Click “Take”, and pop up the window as follows:



Set the alpha time, the adjustment range is 0~10S.

Click “Advance” in “Take” box, and set the DSK parameters in the dialog, including preset, mode, alpha and color.

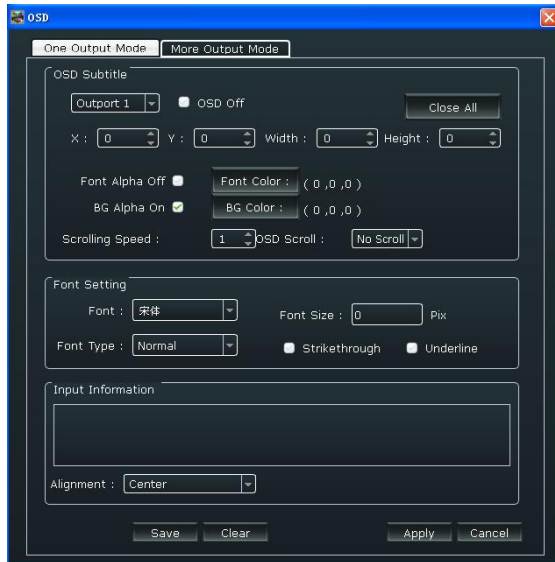


Click “Take” or “Cut” in “Take” box to seamless switch the preview signal to LED display.

If select “Take ON” or “Black ON”, the preview image will seamless switch or black to LED display instantaneously.



OSD: Put the mouse in output screen zone of controlling software, right the mouse, select “OSD”, and the below interface will be displayed. Select One Output Mode or More Output Mode, and set the following items.



OSD Subtitle: Enable or disable the OSD function. When choose “ON”, choose the output port, and set the size, position, font alpha, font color, scrolling speed and OSD scroll mode.

Font Setting: Set the font, font size, font type, user can also choose the strike through or underline.

Input Information: Input the information and choose the alignment.

Click “Save” and “Apply” after setting.



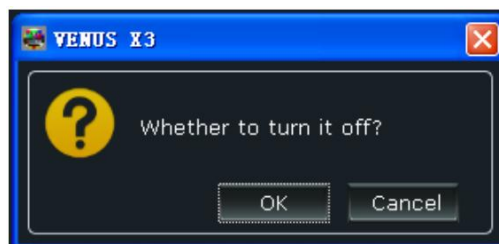
Repeal: Repeal the last level operation.

Other

Power



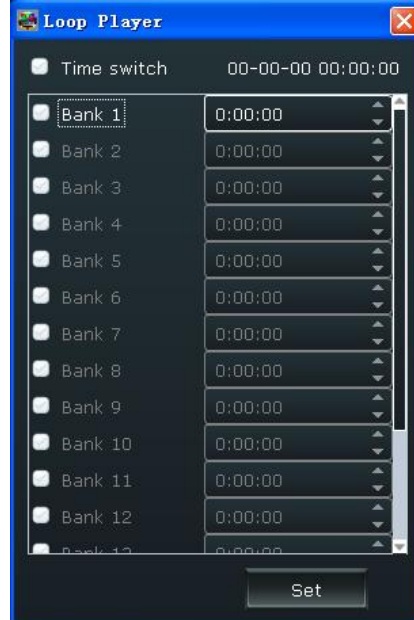
Click “Power Off” icon, the system will prompt “Whether to turn it off”, click “OK” to close the device.



Bank



Loop: Loop function for the scene, set the bank play time.



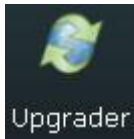
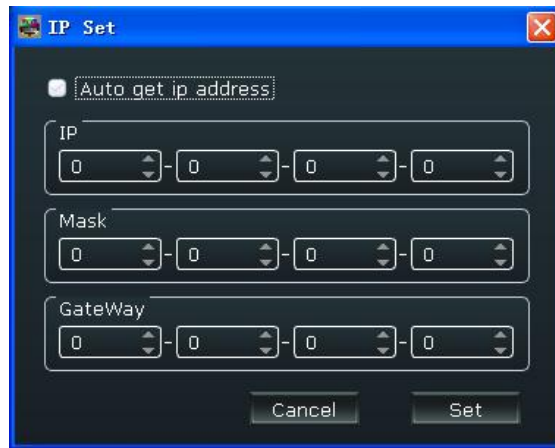
Factory Settings



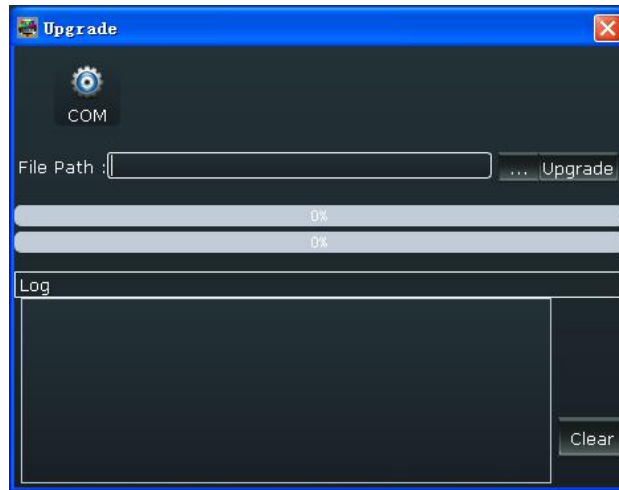
Reset: Reset to factory settings.



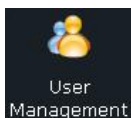
Set IP: Users can set equipment IP, mask and gateway, usually used when one computer control some devices or remote control. It takes effect immediately if users change IP through serial port, and if change IP through network, it takes effect after reopen the software. If choose “Auto get ip address”, user need not set the IP.



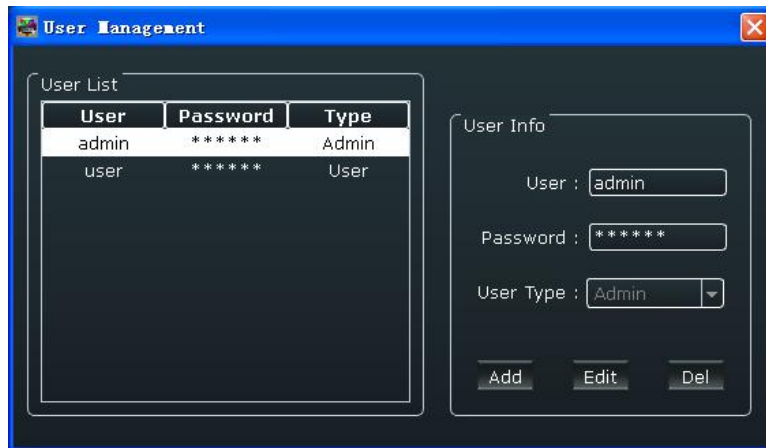
Upgrader: Update the device, and user can clear the log.



User Settings



User Management: Operation permissions settings for manager, log in and set the log password of windows control program.



Stage template select, X3 version 1.4 can not support this function.

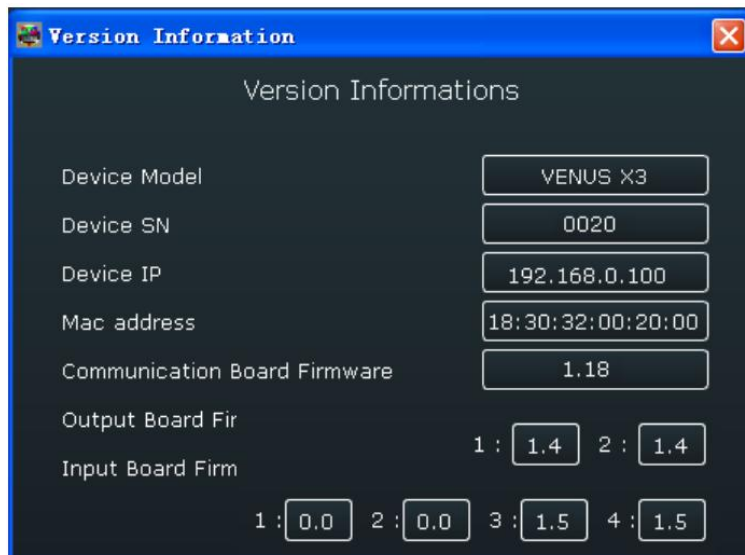
Others



Use shortcut key to operate fast and easily.



Show the device version information.



skin : Can choose the skin as black, blue, white or grass.



Control Interface

Signal Management

Connect the input source, and it will show the output format below "Info".

Signal Management	
Signals Source	Info
Signal_1	DVI(1920x1080@...
Signal_2	No Input
Signal_3	No Input
Signal_4	No Input
Signal_5	No Input
Signal_6	No Input
Signal_7	No Input
Signal_8	No Input
Signal_9	No Input
Signal_10	No Input
Signal_11	No Input
Signal_12	No Input
Signal_13	No Input
Signal_14	No Input
Signal_15	No Input
Signal_16	No Input

Budget Management

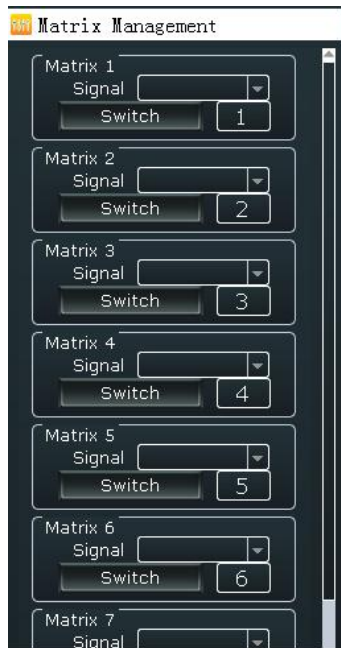
Right click the page name, user can save the settings to page, or open the save page.

X3 supports 16 kinds of pages. User can also edit the page's name and clear one page or clear all pages.

Budget Management	
ID	Budget Name
1	Page 1
2	Page 2
3	Page 3
4	Page 4
5	Page 5
6	Page 6
7	Page 7
8	Page 8
9	Page 9
10	Page 10
11	Page 11
12	Page 12
13	Page 13
14	Page 14
15	Page 15
16	Page 16

Matrix Management

In matrix mode, any operations are unavailable except signal selection and bank selection. Choose the signal, then click "Switch", the signal will be switched to the corresponding output. Connect the signal to the corresponding output after setting.



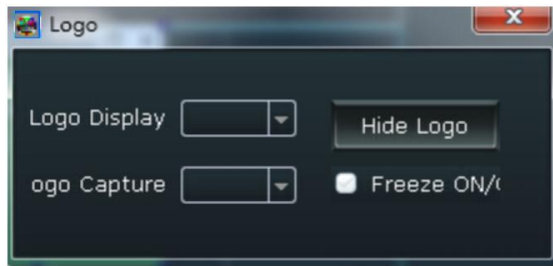
Output Channel

One bank support max 8 output screens, the output channel support 16 scenes.



Grab/Display Logo

Put the mouse on the signal, right click the mouse, select the “Grab/Display Logo”, user can capture logo. X3 max supports 10 logos capture. Choose freeze the image when capture logo. User can choose display or hide logo in the image.



Modify the Name

The device can modify source and scene name, for easy identification and management.

Modify Source Name: Put the mouse on the signal, right click the mouse, select the “Modify the Name”, input the new name in the dialog.



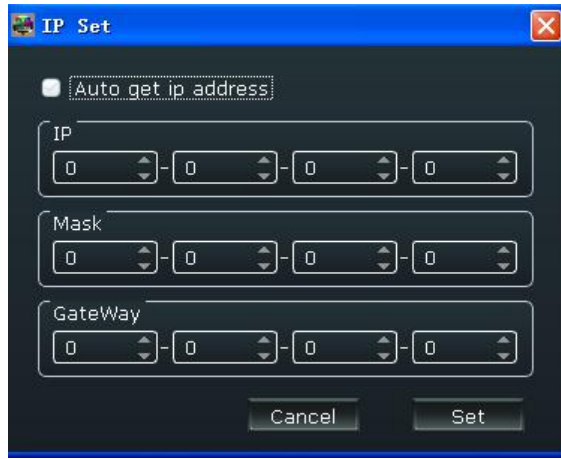
Modify Bank Name: Put the mouse on the bank, right click the mouse, select the “Modify Name”, input the new name in the dialog.



Set

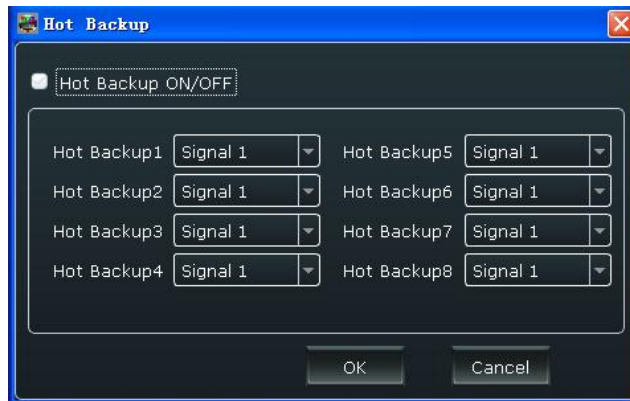
IP Set

Users can set equipment IP, mask and gateway, usually used when one computer control some devices or remote control. It takes effect immediately if users change IP through serial port, and if change IP through network, it takes effect after reopen the software. If choose “Auto get ip address”, user need not set the IP.



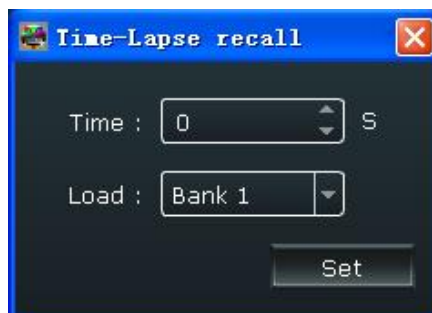
Hot Backup

User can enable or disable the hot backup function. Choose “ON” to set the backup signal for Hot Backup 1 to Hot Backup 8. It will switch to the backup signal if interrupt signal.



Time-lapse Recall

Set the time-lapse recall time and choose the bank that will load.

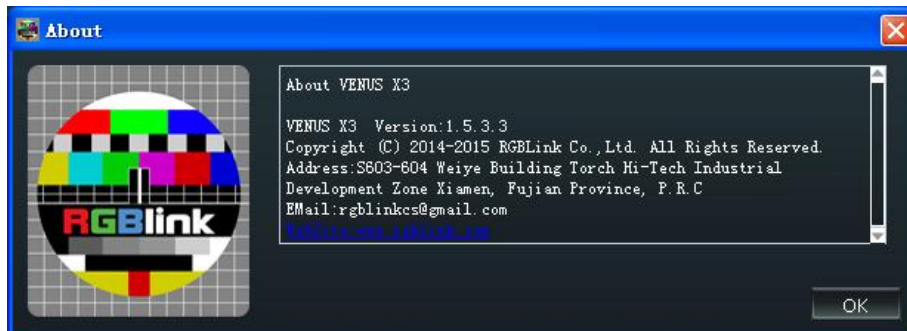


Language

The software supports both Chinese and English, user can switch the language by “Language” option.

Help

About: The information of the software version and the company.



Information Toolbar

It shows the serial, device name, software version and serial number in the bottom of the software interface.



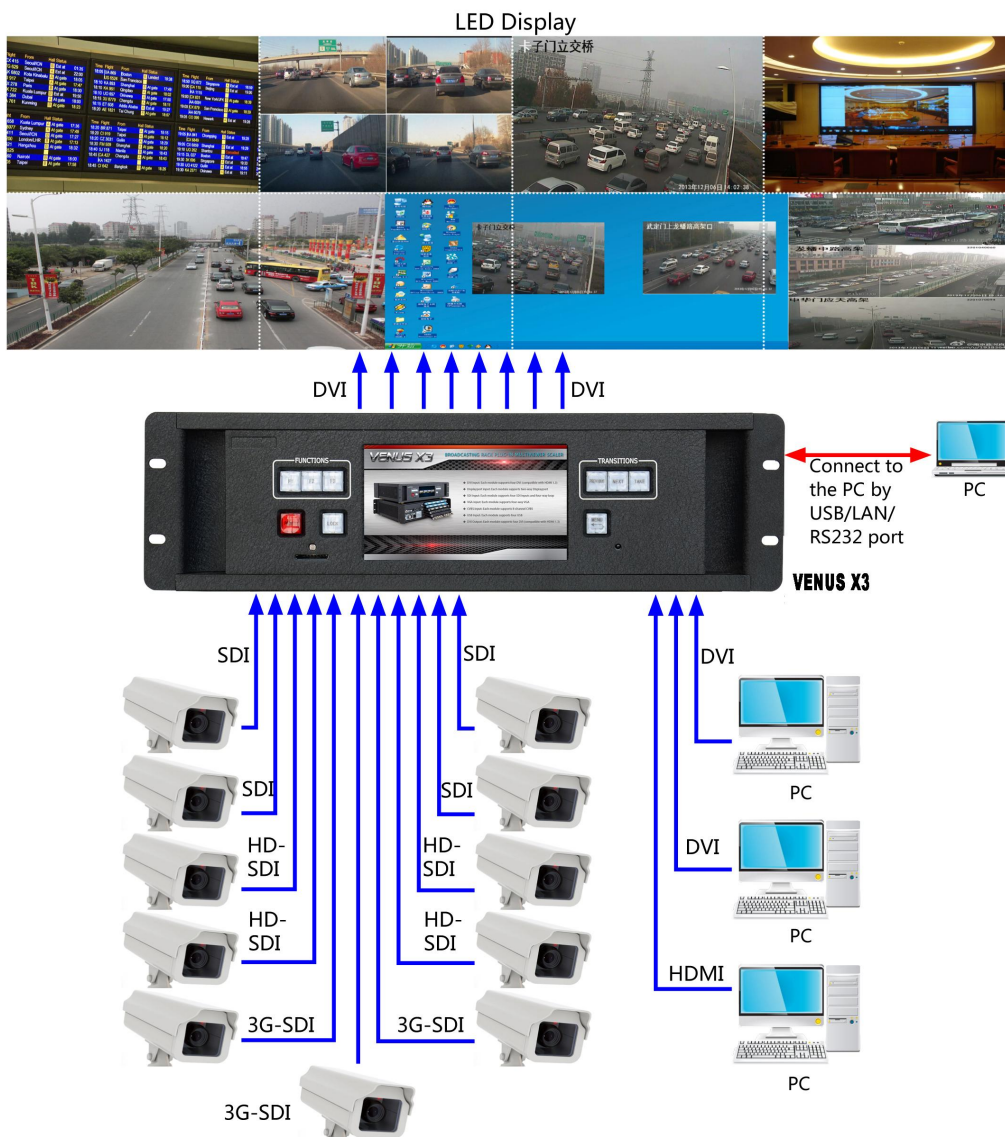
Product Application

Command and Control Wall Splicing System

The following project use X3 to deal with 11 monitor camera signals and 3 computer signals. The 11 monitor camera signals include 4 standard definition signals, 4 HD signals, and 3 3G-SDI inputs. And the 3 computer signals include 2 DVI signals and 1 HDMI input.

The output includes 2 DVI output cards.

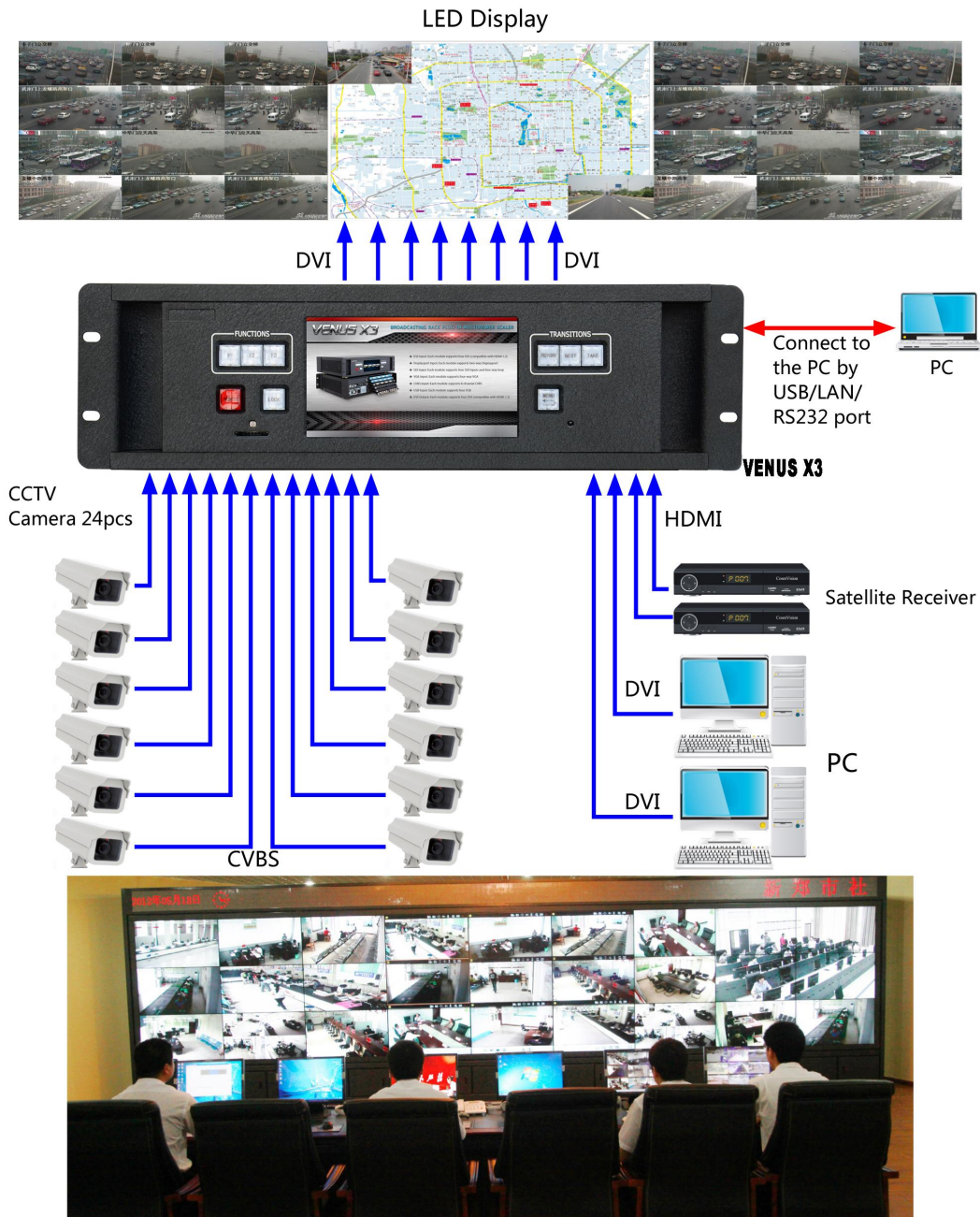
One output screen can support max 4 images, and up to 16 images for 8 output screens.



Security and Surveillance Wall Splicing System

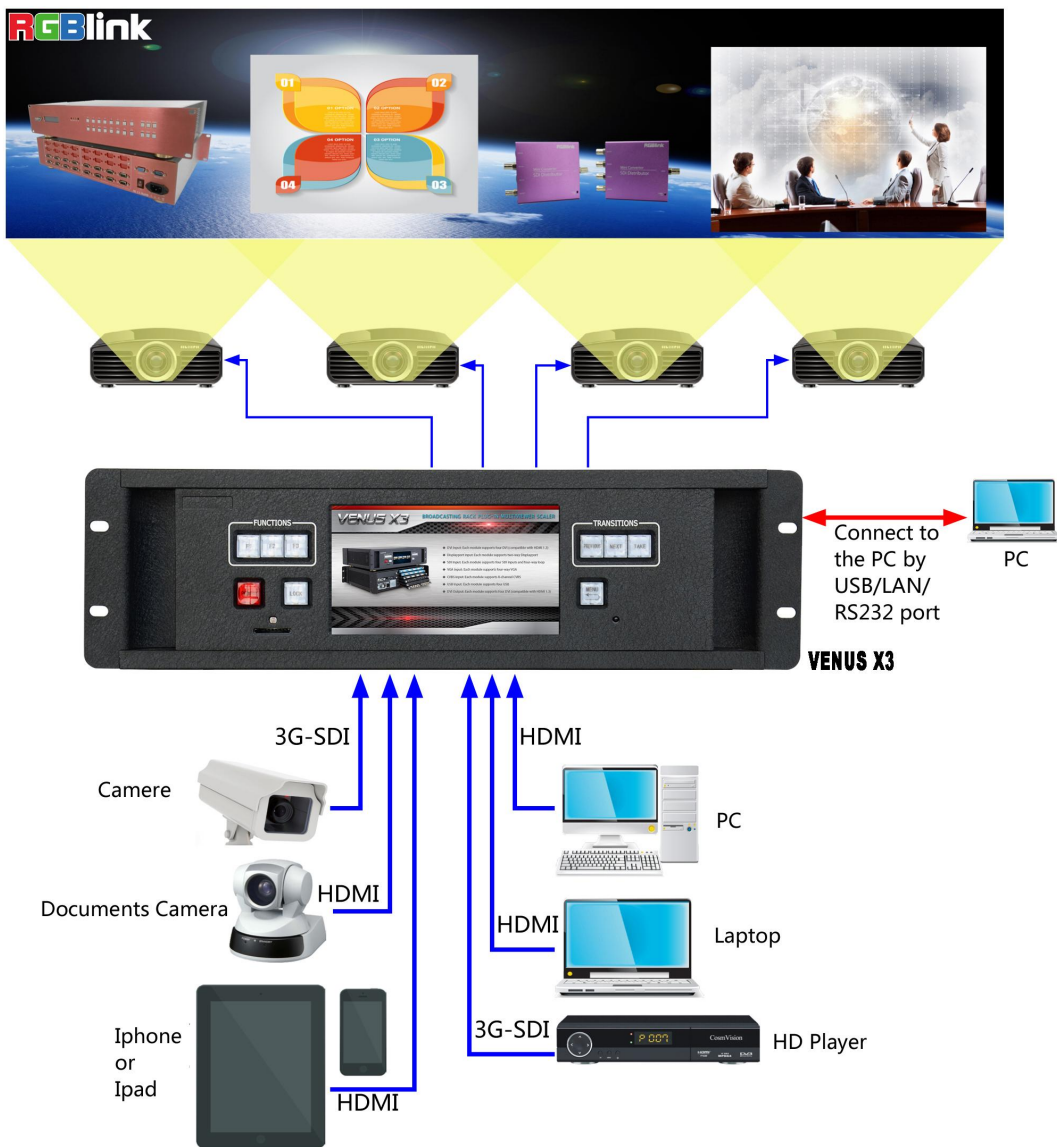
In this application, the input signal source includes 24 standard definition CCTV cameras that used to monitor, 2 satellite TV receiver and 2 computers. The standard definition signal source is connected to a 3 CVBS video input card, and satellite receiver and computer respectively by the mixture of HDMI and DVI input.

X3 3U Rack supports 24 inputs and 8 outputs for splicing wall.



Executive Conference Room

In this application, X3 uses 2 edge fusion cards, and supports 4 edge fusion projectors, create a seamless display for a large administrative conference room. The 2 edge fusion output cards provide 4 superposition signals for the projector, and create a seamless image by overlap. The 2 3G-SDI input cards input signals from video conference system, the camera provides real-time product image, and the HD player provides the enterprise's promotional video. The 3 HDMI input cards receive signal from the desktop, the laptop and the documents camera. The 1 HDMI input card receive signal from other configuration such as HDMI adapter. Any combination of signal source can show on anywhere on the screen at the same time.



Contact Information

Warranty:

All video products are designed and tested to the highest quality standard and backed by a full 3 years parts and labor warranty. Warranties are effective upon delivery date to customer and are non-transferable. RGBlink warranties are only valid to the original purchase/owner. Warranty related repairs include parts and labor, but do not include faults resulting from user negligence, special modification, lighting strikes, abuse(drop/crush), and/or other unusual damages.

The customer shall pay shipping charges when unit is returned for repair.

Headquarter: Room 601A, No. 37-3 Banshang community, Building 3, Xinke Plaza, Torch Hi-Tech Industrial Development Zone, Xiamen, China

- **Tel:** +86-592-5771197
- **Fax:** +86-592-5771202
- **Customer Hotline:** 4008-592-315
- **Web:**
 - ~ <http://www.rgblink.com>
 - ~ <http://www.rgblink.cn>
- **E-mail:** support@rgblink.com