DID LCD Video Wall Unit User Manual

Thank you for purchasing our products. Please read this user manual carefully before using the products. To ensure the correct installation and operation, please keep the user manual in a safe place for future reference.

Quality Products, Superior Service

Safety Precautions

Important safety precautions

1. Power

Please use single-phase and three wire 220V power supply with grounding. Do not use the power supply without grounding, and grounding pin can not be destroyed. 2. Power off

Please power off the device and pull the plug when you need to move the device or do other operation that requires power outage, to ensure the safety of you and the device. 3. Ventilation

The vents in the device are designed for ventilation. Do not cover or block these vents since insufficient ventilation can cause overheating and/or shorten the life of the product.

4. Condition

Device working condition should pay attention to dust and moisture, in particular, to prevent the liquid soaking and splashing into the device. 5. Repair

All repair works should performed by a qualified service person. Do not try to repair yourself without any training. To prevent electric shock, do not open the case without permission.

6. Safety Precautions

6.1 Do not attempt to service the product yourself. Removing covers can expose you to high voltage and other dangerous conditions. Request a qualified service person to perform servicing.

6.2 Do not put the device where water may drip or splash onto it. Do not put any containers with liquid on the device.

6.3 For fire preventing, keep the device away from hear sources;

6.4 For sufficient ventilation, device front and back panel should keep 20CM inter-space at least;

6.5 If device occurs strange noise, smoke or smell, unplug the power cord from AC outlet, and request a qualified serviceman to perform repair; 6.6 Please unplug the power cord if there's thunder or not use it for long time; 6.7 Do not insert any object from device vents, as it will cause device damage or electric shock; 6.8 Do not use the device near water or any other moist place;

6.9 Do not use the device near heat source or any other place with high temperature;

6.10 The power cords must be routed properly to prevent people from stepping on them or objects from resting on them;

6.11 If any of the following conditions occurs, unplug the power cord and request a qualified serviceman to handle.

a. When the power cord or plug is damaged.

b. When a liquid was spilled on the device.

c. When the product has been dropped or damaged.   d. When the product displays an abnormal condition.

★ Please read the user manual carefully before using the product and keep it in a safe place for future reference.

Catalogue

Content

Overview

Chapter 1: Overview

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Chapter 2: Classic LCD Video Wall System Topology Graph
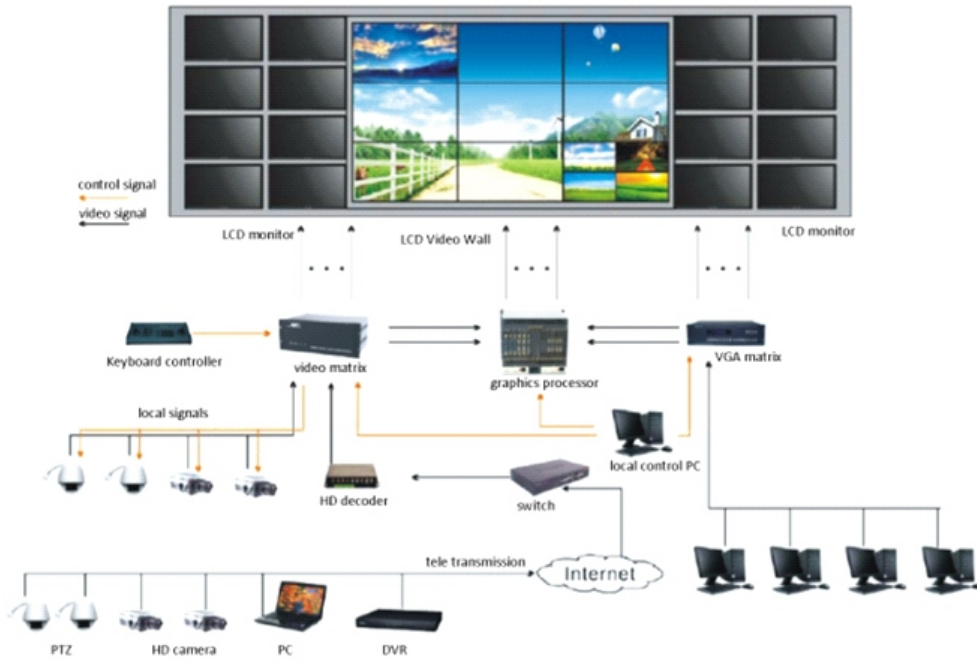
Chapter 3: video wall display features

1. Flexibility
According to the customers' actual demand, it can flexibly splicing the screens to 1x2/4x5...up to 16x16 video wall.

2. Reliability
The displays are with embedded video wall processor, which greatly improves the product reliability.

3. 3D DNR
Adopting 3D comb filter and 3D deinterlace and advanced deboucing and 3D DNR Technology, it makes the static and dynamic video images stable and clear.
Automatically recognize different format signals from VGA input. The application of advanced digital IPA for real-time segmentation and amplification signal and display. The image is clear and smooth, without any movement jagged and mosaic phenomenon.

4. Simplicity
Complete hardware on processing. It does not need computer or start software, etc. Very easy to operate, The device will work just with connecting the signal cable and power on.

5. HD output/input support multiple general HD format, like 720P, 1080I, 1080P, 4K input and output.

6. Support effect preservation. Control software allows the users use any signal and any splicing mode, as well as the stitching window location and layout, etc. Users can do integrated adjustment on different displays effect, in order to achieve the consistent overall effect and keep the site parameter into effect files for the convenience of invoking it at any time.

Chapter 4: Ports of Video Wall Display .
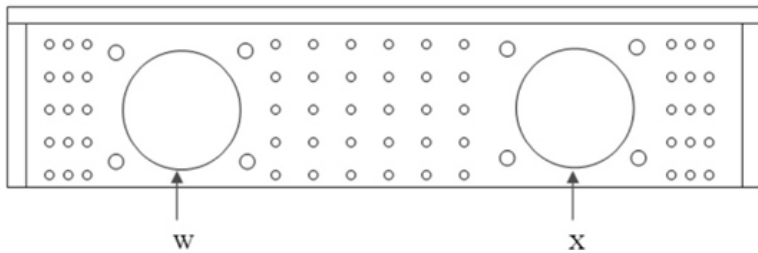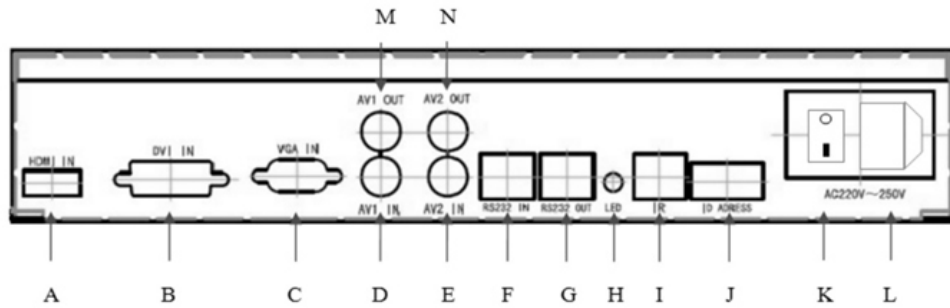
SN	Definition	Remark
A	HDMI signal input	
B	DVI signal input	
C	VGA signal input	
D	CVBS-1 input (BNC)	
E	CVBS-2 input (BNC)	
F	RS-232 input	With RS-232 to RJ45 converter into RJ45 port, the plug of RJ45 cable needs to be 586B standard
G	RS-232 output	
H	Power indication led	Power on: green Standby: orange
I	Remote controller receiver	
J	Address code switch	See the reference for address code set
K	220V power switch	
L	220V power socket	Input voltage range: 100V~240V AC
M	CVBS-1 output (BNC)	
N	CVBS-2 output (BNC)	
W, X	Cooling fan	

Chapter 5: Row & columns address sets in Video Wall Display

As shown in the figure above, address code set method is as follows. Row address switch: 1-4, column address switch: 5-8. Their address set method is according to BCD code (Binary-Coded Decimal). Each switch set is valid if dial on, value is 1, it is invalid if dial off, value is 0. Like photo below.

Corresponding video wall processor address switch for screen 1 should set as follows.

Row address=(value 1)*8+(value 2)*4+(value 3)*2+(value 4)*1

=0*8+0*4+0*2+0*1=1

Column address=(value 5)*8+(value 6)*4+(value 7)*2+(value 8)*1

=1*8+0*4+0*2+0*1=1

Corresponding video wall processor address switch for screen 1 should set as follows.

Row address=(value 1)*8+(value 2)*4+(value 3)*2+(value 4)*1

=0*8+0*4+1*2+1*1=3

Column address=(value 5)*8+(value 6)*4+(value 7)*2+(value 8)*1

=0*8+0*4+1*2+0*1=2

Chapter 6: Introduction for Video Wall Software

nstallation and application for PC client software Multi-Screen Display System.

System running environment

Operating system: Windows 7/8/XP CPU Minimum configuration: Pentium 133Mhz

RAM: 128MB

Video card: standard VGA, 256 colors display mode and above

HDD: typical installation 10M

COM port: standard RS232 communication port or other compatible ports

Other device: mouse

Start-up System

Please make sure below connection normal before running the system.

1. PC's RS232 cable for running the system already correctly connected to the

controller. 2. The related controller's signal cables, power cables are correctly

connected.

System running steps:

1. Power on controller, the power indication led will be on. Greens means the device are

in running status, orange means the device is in standby status.

2. Running the software

Find out folder for the control software, click Multi-ScreenDisplaySystem.exe to run. It

will come out the interface as below.

(with the different software version, below operating interface and its content will exist

some difference. Please contact the sales for details)

1. Method of setting soft address.

After all video wall displays are finished mounting, the first step is to set each unit's soft address. It will create random code when first starting the device. (the default random code is 00000, it needs to reset the random code). According to the random code, it can set video wall unit's corresponding correct address.

1. Method of setting soft address.

A: open control software "wall system", and click upper left icon, choose login, and input user and password.

B: Click Setting -- Port, to choose corresponding control port. Baud rate is 9600, and click Add -- OK. Like picture below.
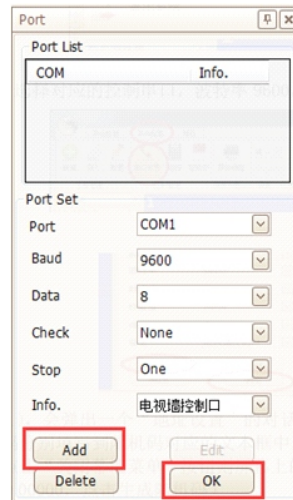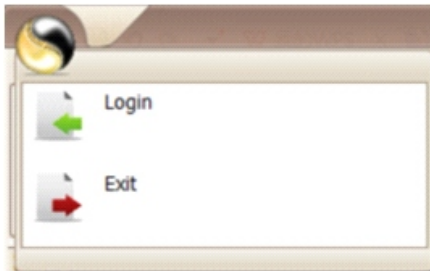
Chapter 6: Introduction for Video Wall Software

C: Click ID Set (figure 1), it will pop up a message box for address set (figure 2). Meanwhile, the video wall will display a random code, please fill 5 random code numbers in the corresponding text box, and then write the display's level address and vertical address, and click Apply. Click close button, random code menu on displays will disappear. And then correct address setting finished. (Default Random code is 00000, it needs to click generate random to get random code).
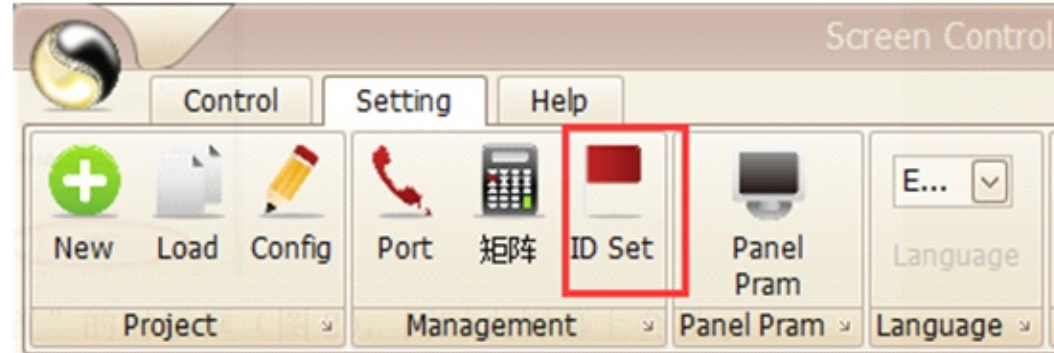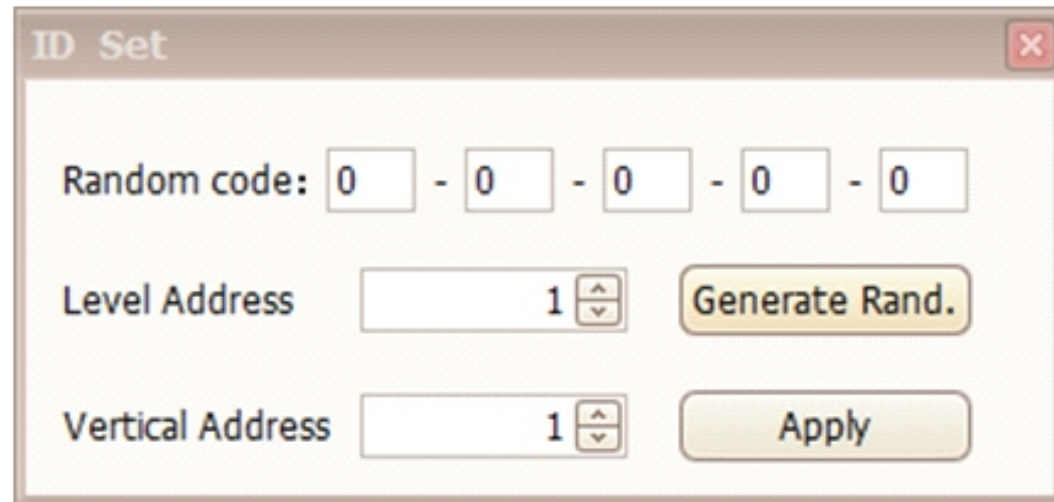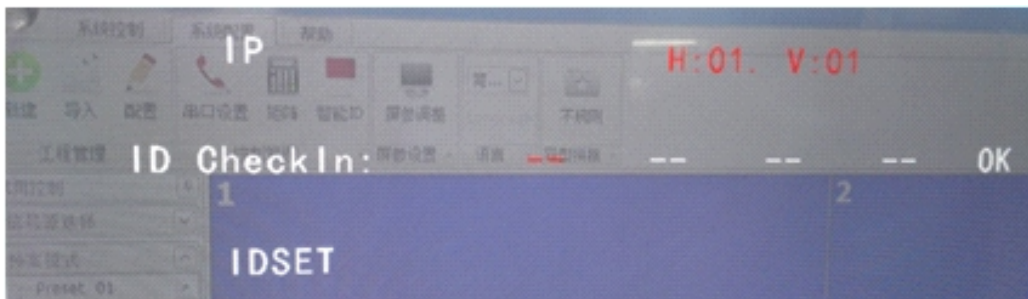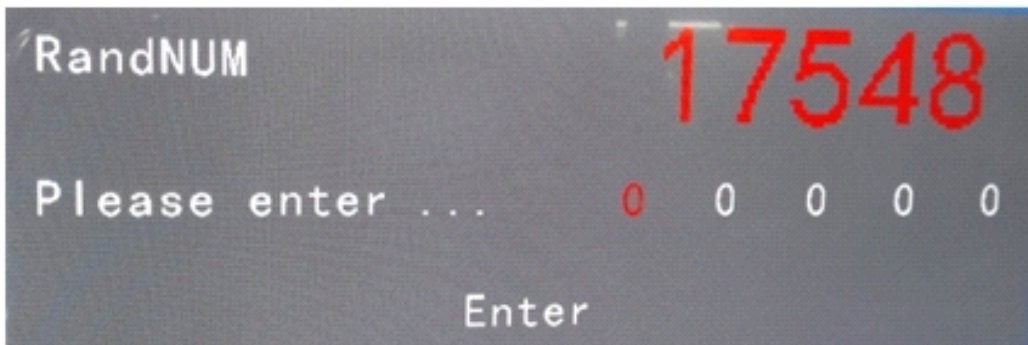
Figure 1

**Figure 2**

Method 2: Set address via remote controller

A: Press Random Code (随机码) button, it will come out the image below(figure 3), and choose "IDSET"

B: After clicking OK, it will go to the interface as figure 4. Please input corresponding random code and click Enter.

C: After above steps, it goes to the interface as figure 5, input corresponding wall's address and splicing qty, then it finishes address setting. (system default random code is 00000, please click and reset it)
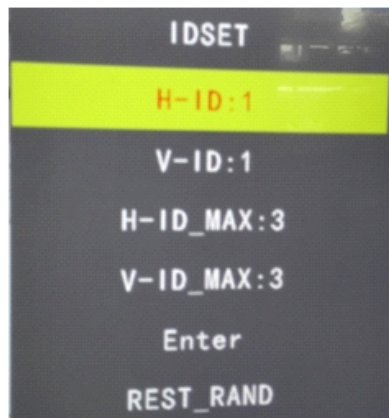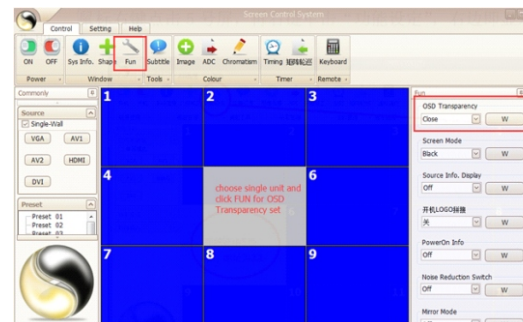
2. Video wall Setting

A: New project
For first use, it needs to add new project. Click Setting -- New, then it will come out new video wall page on right. Rows for how many screens in vertical line, Column for how many screens in horizontal line. For example, if the installed video wall horizontal lines have 3 screens, and vertical line have 4 screens, then wall set should be Row 3, Column 4. Type: must be corresponding drive board type, otherwise some function can not use.
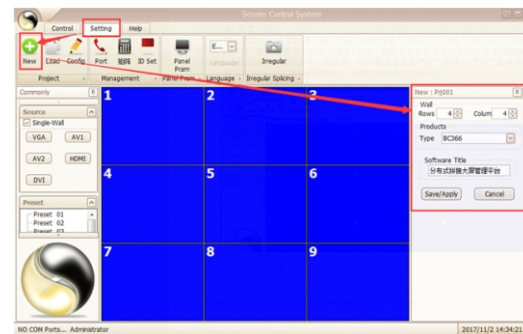
B: Wall solution
Click to choose the unit that needs splicing(as figure below), and choose the signal source from left message box, then it will finish video wall combination. If choose single-wall, it will show in single screen.
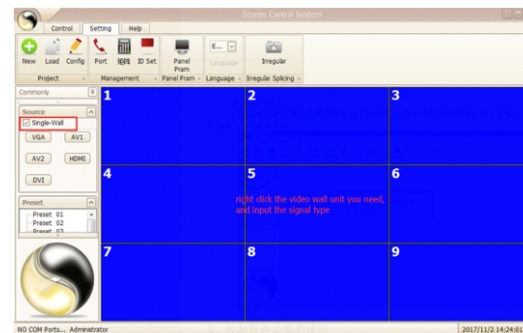
3. Function use for control software
After video wall combined, if you need to obtain some screen unit's specification, then just choose its screen coordinate on software, and click FUN, it will come out the detailed operation items as below. For example, if you choose screen 5 and adjust its OSD transparency, the operation will be:
Click screen 5 -- click FUN, the right box will show the detailed items. You just adjust OSD transparency.

2. Video wall Setting

4. Adjustment for color difference on screens

If the signal is VGA, please set the video wall display to gridiron pattern, and then find ADC function in control software, and click auto color adj. for adjustment.
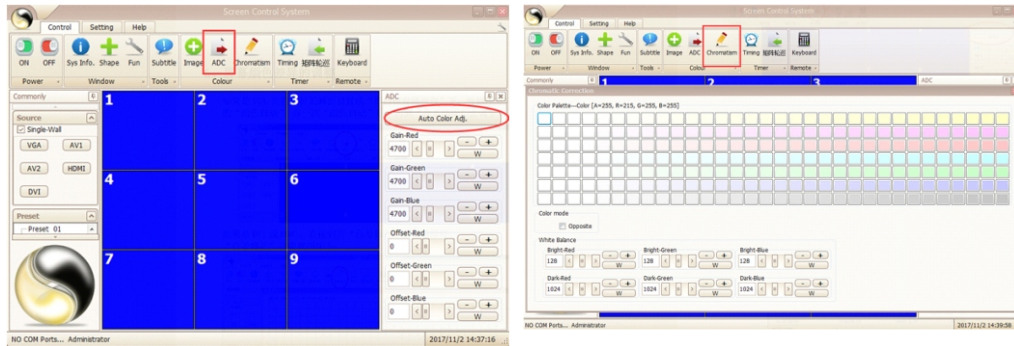

If it is DVI or HDMI signal, just go to Chromatism in control software for adjustment. (as figure below)

According to the colors in color palette, you can set any color as you want.

5.Save preset and call

Choose certain preset in Preset mode, and right click the mouse to choose save preset, it will save the current specification to the chose preset. It also can rename the preset with clicking Rename. Double clicking the preset can call the chose preset's
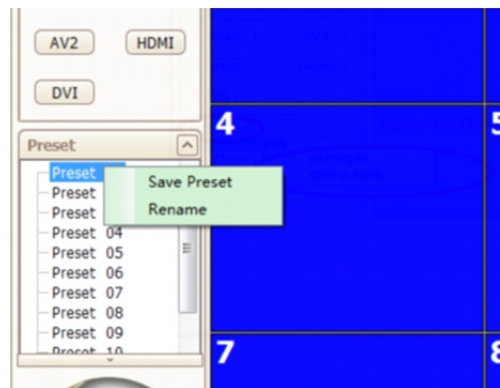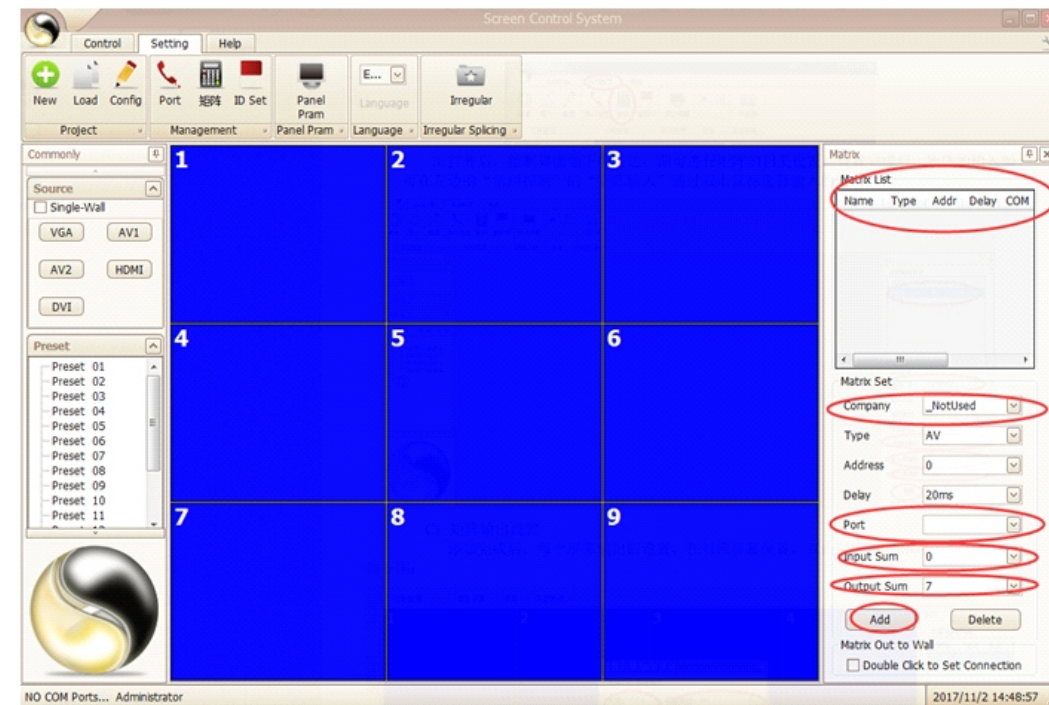
6.Matrix input

A: Choose setting--矩阵 (matrix), and click, as figure below.
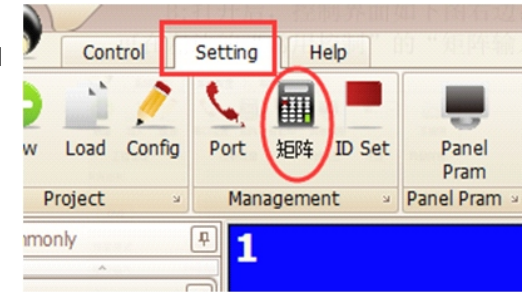
B: After that, control interface will come out as right part of the figure below. Then you can do the settings for matrix. After setting, you can set matrix input at Commonly--Matrix input to choose input port with double clicking.

Chapter 7: FAQ

When the display has problem, do not try to take it apart for repair, it may cause the products worse defect. You can clear the problems with following steps. If problems are still not solved, please contact local distributor or professional serviceman. It will not be in warranty range if the products are repaired by user himself.

1. The product can not start. (Power indication LED is not on)
   a. Check whether the power cables are damaged;
   b. Whether the monitor are connected with power supply;
   c. Whether the power supply is ON;
   d. Whether power switch is damaged;
   e. whether fuse is fusing.

2. It prompts PORT ERROR when Running control software
   a. COM port for control software is not open or is damaged, please check COM port connection status or change COM cable or main control PC;
   b. COM port with USB to RS232 is not correctly installed. Please correctly install USB to RS232 device.

3. All video wall unit can not controlled
   a. Check the port set for video wall software is correct;
   b. Check whether COM cable is damaged, whether the video wall unit has good connection to PC port;
   c. Check if PC COM port has problem, or you can change another PC for test;
   d. Whether video wall unit's address set is correct, see ADDRESS SET for reference.
4. Individual video wall unit can not controlled
   a. Check whether this unit's address set is correct;
   b. Check whether it can be successful to control this unit separately;

5. Single or multiple device signal can not input   a. Check whether the video wall has good connection to signal source port;
   b. Test with another signal cable;
   c. whether the device is set to corresponding input status;
   d. Whether the input signal is beyond the video wall input ability range.

6. Image can not display
   Possible reason: No input signal; Signal channel is not switched well (i.g: input VGA signal, the channel choose on VIDEO, video input and output inversely connected); output signal cable damaged
   Solution: Check input signal, adjust the status for the input device that needs to display;
        Confirm the input channel and make channel switch with control software;
        User good quality signal cable, to ensure the image's stability and high quality.
7. Images has color cast problem
   Possible reason: Signal port does connect well, loosen makes poor connection;
        Signal cable damaged;
        Color adjustment for display device is incorrect;
        Over color adjustment through control software.   Solution: After signal port connected, fasten the fix screws, to prevent the looseness from pulling;
        Change another better quality signal cable;
        Refer the user manual, to adjust display device's color balance;
        Re-adjust color through control software.

8. Incomplete display, black edge occurs
   Possible reason: Adjust too much on image's position through control software
   Solution: Re-adjust the image's position through control software, to get the effect you need

9. Some video wall unit has splash, flutter or sports.   Troubleshooting: Signal cable too long cause sever signal damage;
        Input signal device unstable or cable damaged.