

X14 Quick Start



- 23 slots for flexible input and output modules collaboration
- Redundant hot swap power supply option and auto temperature control
- Seamless switching 52x40
- Up to 80 mega pixels output splicing
- Display up to 160 layers
- Compatible with all display system
- 12G SDI input
- 4K@60 input and 4K self-defined EDID
- EDID management
- Independent PST, multiple pictures seamless switching
- Streaming preview any input signal
- 3D signal input and output display
- Rotate each output independently in 1 degree increment
- DSK and OSD text overlay
- Built-in Genlock

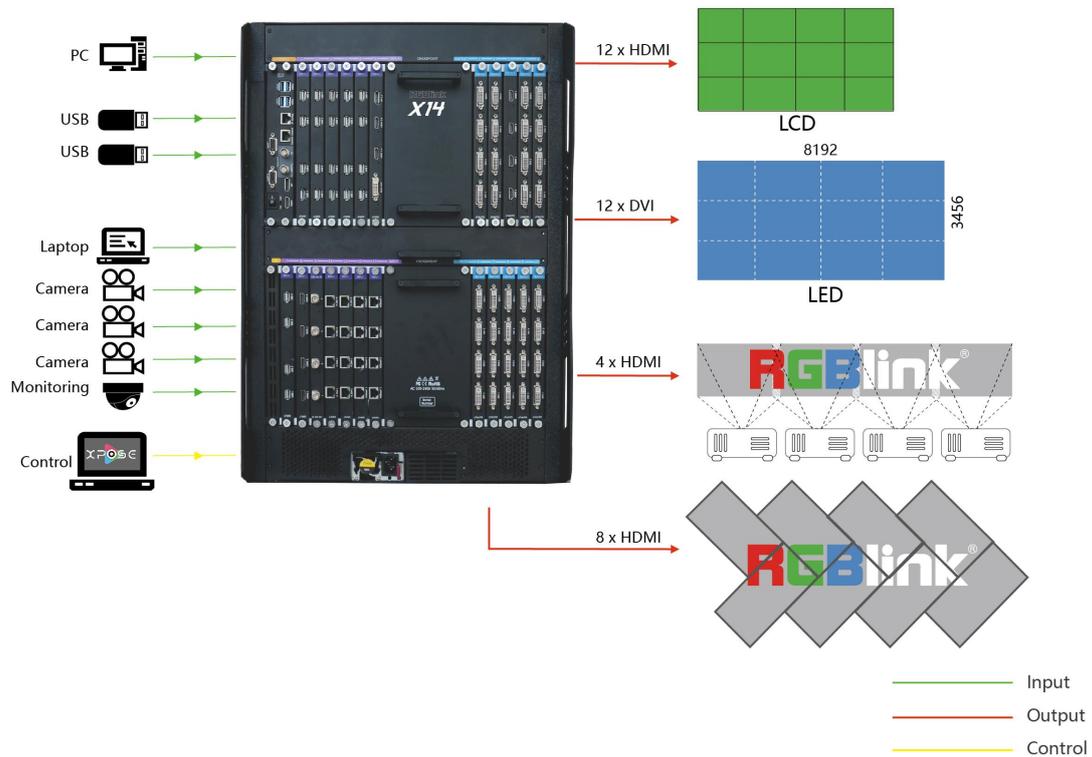
CONTENTS

Product Introduction.....	3
Packing Configuration.....	4
Hardware Orientation.....	5
Back Panel.....	5
Front Panel.....	6
Use Your Product.....	7
Install XPOSE 2.0 Software.....	7
Control X14 By XPOSE 2.0.....	11
Log in XPOSE 2.0.....	11
Topology Diagram.....	13
Output Input Overview.....	16
Display System.....	34
Layer Management.....	39
Preset Management.....	43
Keyboard Setting.....	48
System Setting.....	50
CONTACT INFORMATION.....	52

Product Introduction

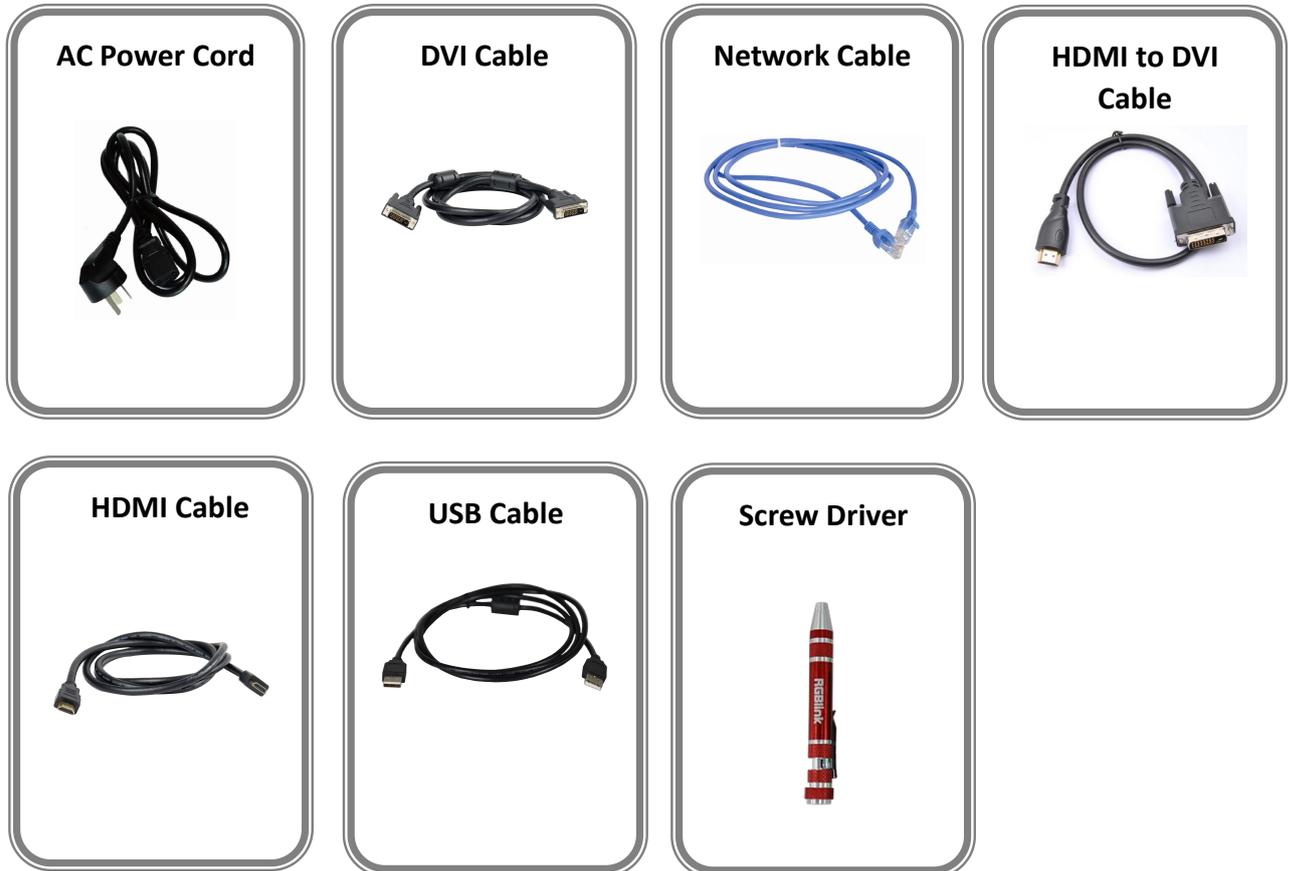
For entire video display systems, X14 brings a new level of efficiency, capability and control. Supporting up to massive 52 inputs and up to 40 outputs, X14 truly brings together large video systems for system-in-box approaches to video presentation and integration. Modular throughout RGBlink technologies support user fit input and output signals with each slot configurable up to 4K/UHD resolutions at full frame rates. With so many inputs, windowing and layering capabilities have been dramatically enhanced over earlier models and the output canvas is up to 80 Mega pixels. Dedicated preview functionality is available both remotely via XPOSE and on the inbuilt LCD display. XPOSE is embedded directly into X14 too, providing not just monitoring but extensive control capabilities. X14 takes advanced video processing and scaling to a whole new level.

System Connection Diagram



X14 System Connection Diagram

Packing Configuration



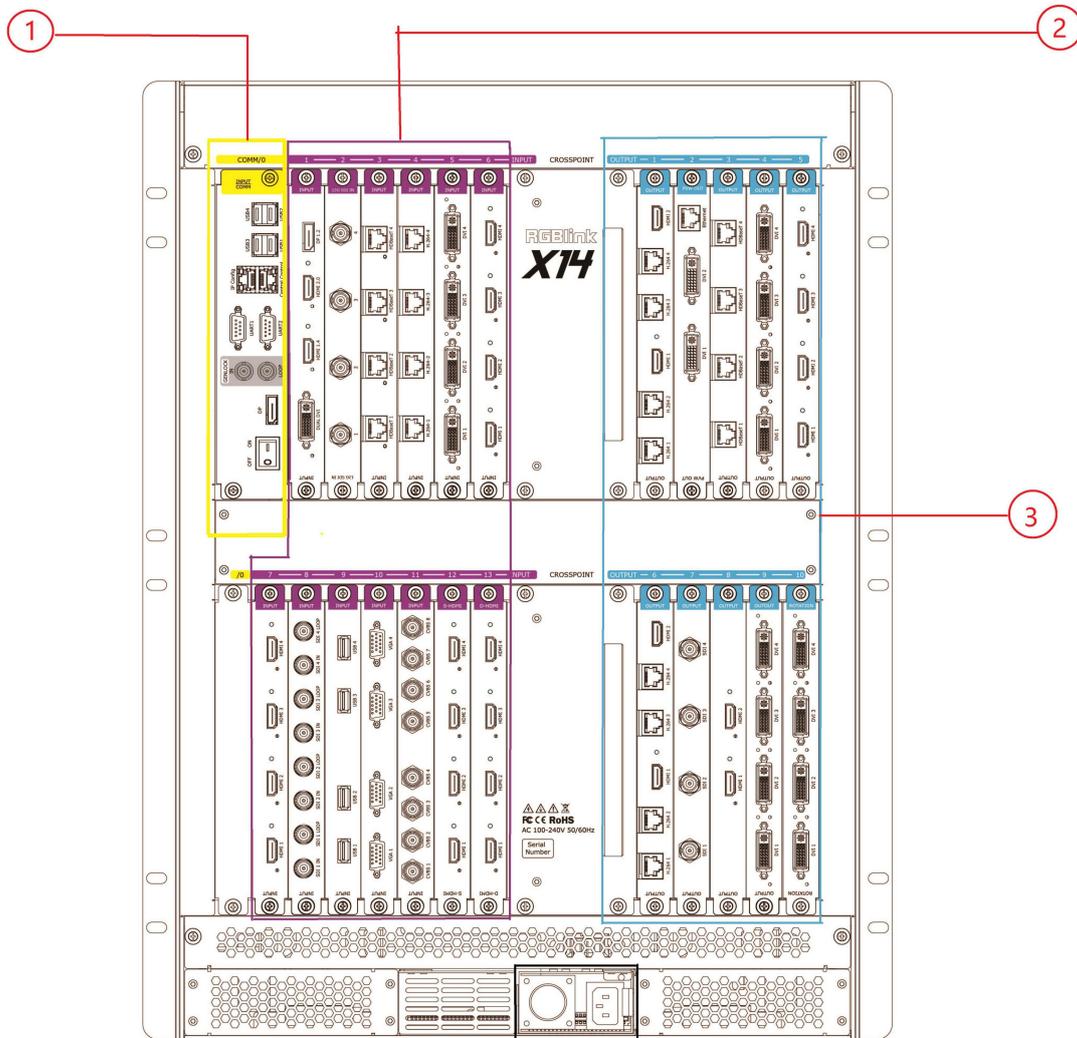
Note:

AC Power Cable supplied as standard according to destination market.

USB is contained on the Warranty/Registration Card. Please keep.

Hardware Orientation

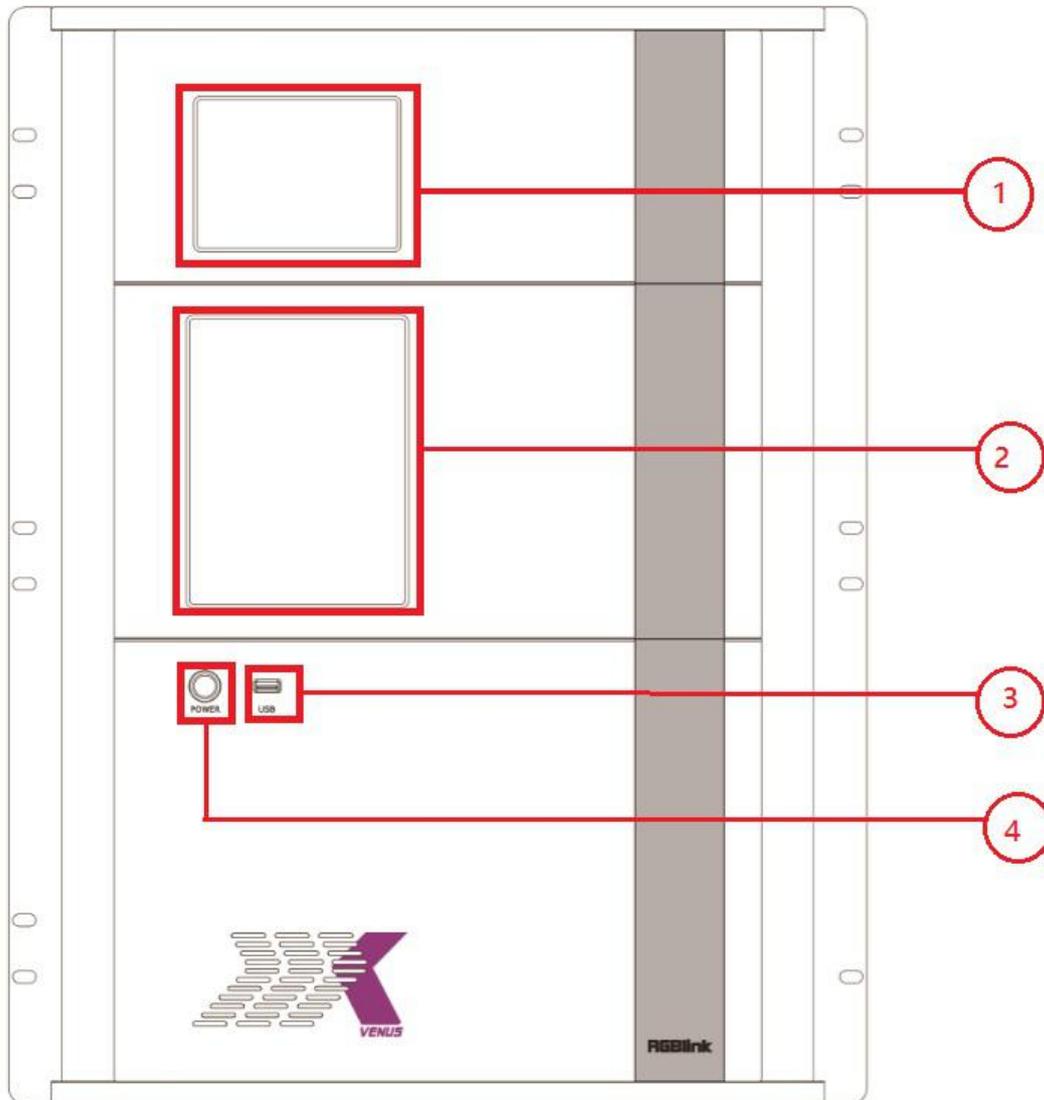
Back Panel



1	Communication board
2	13 slots for input modules
3	10 slots for output modules
4	2 slots for modular power supplies



Front Panel



1	5.6 Inch TFT-LCD Display OSD Displays the input slot and output slot information, device status, COM. Version, IP address and serial number.
2	8 Inch TFT-LCD Display Monitor screen, to preview the pictures of the selected input
3	USB 2.0 Prepared for keyboard or mouse to connect
4	Power Power button, to turn on the device



Use Your Product

Install XPOSE 2.0 Software

Environment Requirements:

Window

Processor: 1 GHz or above 32 bit or 64 bit processor

Memory: 4 GB or more

Graphics: Support DirectX 9 128M or above (open AERO effect)

Hard disk space: Above 16G (primary partitions, NTFS format)

Monitor: Resolution must be 1920x1080 pixel or above (it can not display normally if the resolution is lower than 1920x1080)

Operating system: Windows 7 or above (full version, not Ghost version or compact version)

CPU:i5 and above

Mac

Monitor: Resolution must be 1680x1050 pixel or above (it can not display normally if the resolution is lower than 1680x1050)

CPU:i5 and above



Double click `_Setup`, it will pop-up the installer language box, select the language, for example, select "English", and click "OK" to confirm.



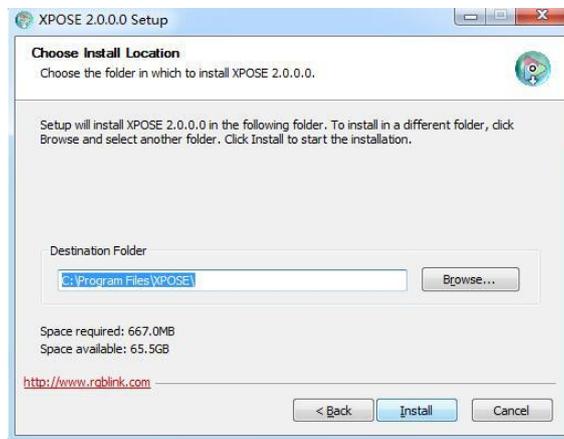
Click "Next" to install:



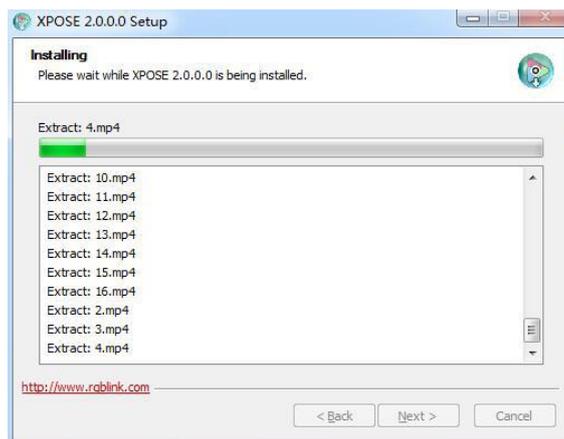


Click

Click "Browse..." to select the XPOSE software install location:

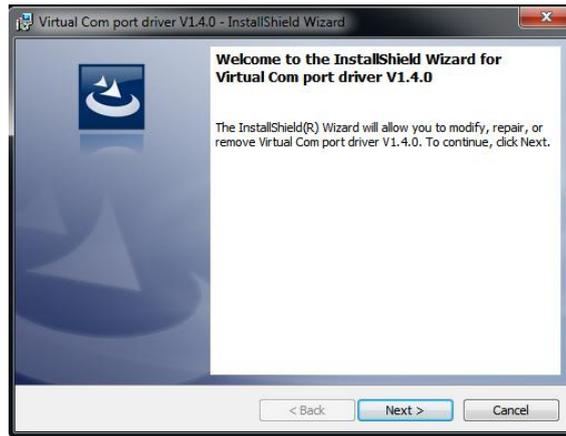


Click "Install":

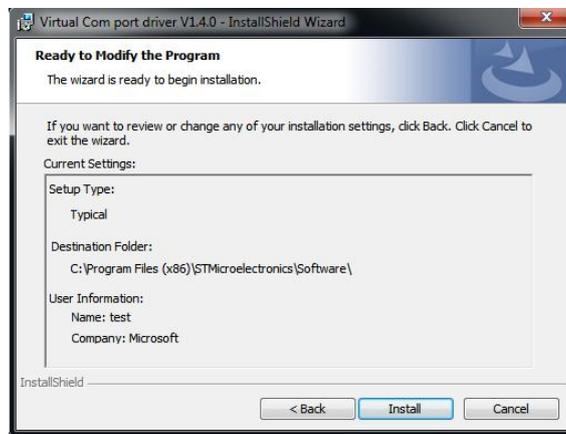


During installation, it will pop up the window of Install Shield Wizard for Virtual Com port:





If user install the XPOSE software for the first time, click “Next



Then click “Install”, as shown in the figure below:



Click “Finish” and complete the installation, as shown in the figure below:



Click “Finish” and is ready to run the XPOSE :

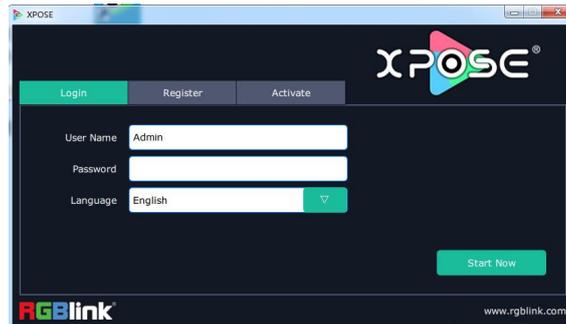


Control X14 By XPOSE 2.0

Log in XPOSE 2.0



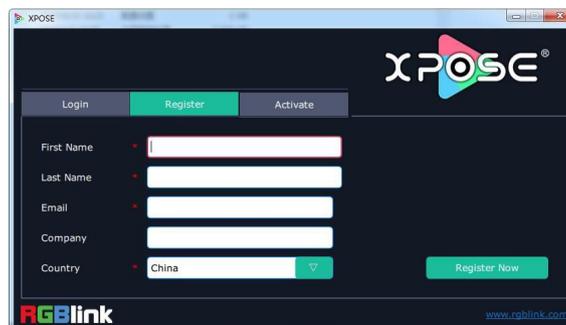
Double click this icon ,and enter the log on interface as follow



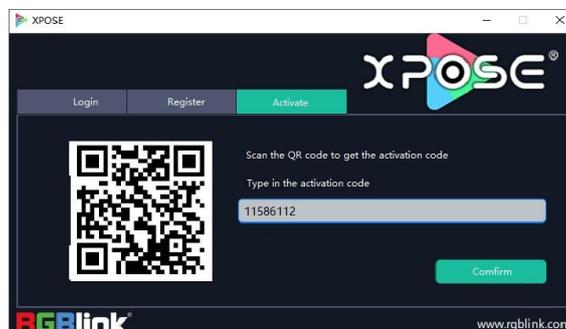
The initial language of XPOSE 2.0 is self adjusted based on the operation system language of the computer. **Click Register** and fill in the blank with first name, last name, email, company and country and then click **Register Now**.

Registration complete.

Please note that the email shall be invalid and complete otherwise registration cannot be completed.



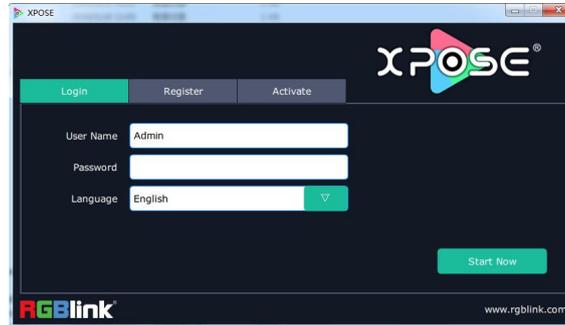
Click **Activate** and scan the QR code



an email from **RGBlink Registrations** will be sent to the **Register** email address.

Your XPOSE Registration & Activation Code is
11586122

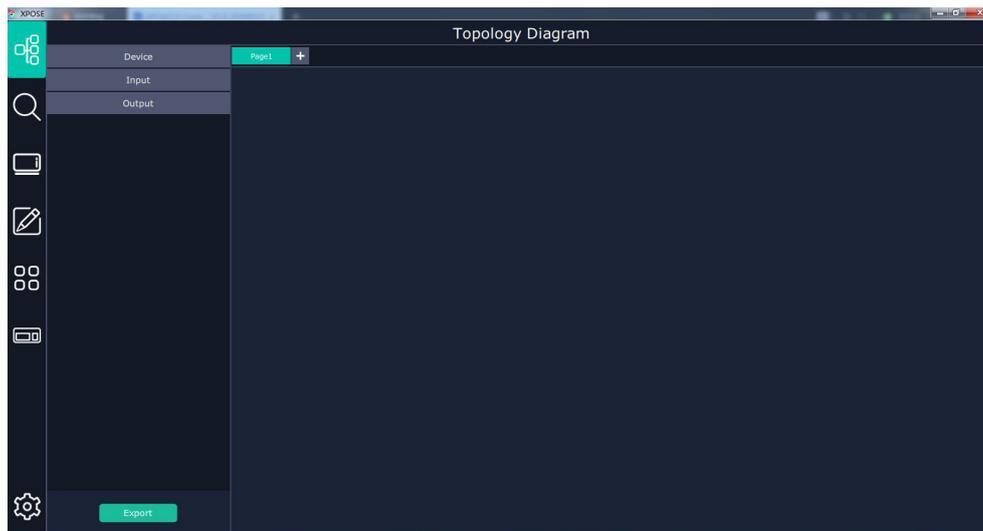
Type in the activate code and confirm, it will automatically skip to **Login**



Keep the user name as "Admin" and password blank and then click **Start Now**.

Note: If exact Users Name and Password are needed, users can set up them in Authorization Setting under System Setting.

After login, users can find the management including: Topology Diagram, Search, Display System, Layer Management, Preset Management, Keyboard Settings and System settings. The details of each hierarchy will be described hereafter.



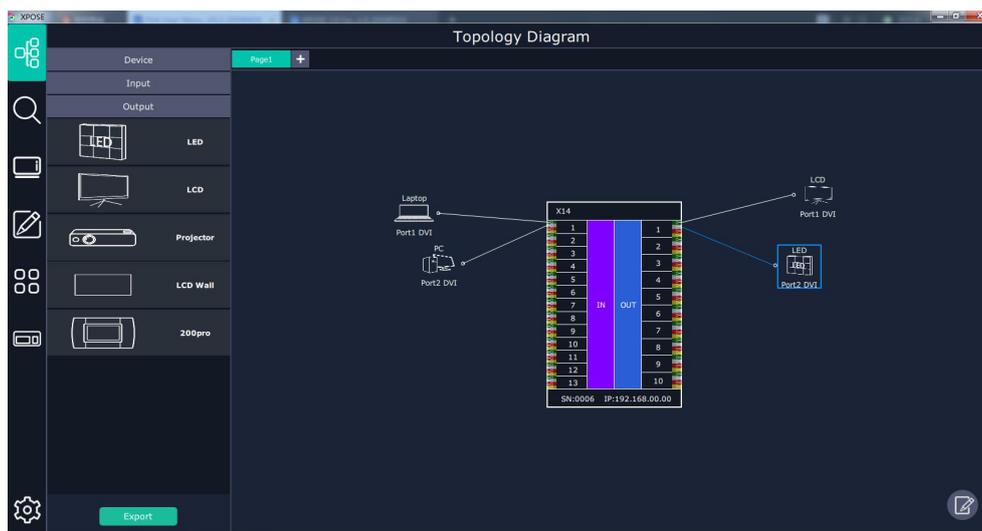
In the following text, we are going to take XPOSE 2.0 control X14 as example to illustrate how to use XPOSE 2.0.



Topology Diagram

XPOSE 2.0 offers the feature of making topology diagram which can assist users to import the actual input and output connection into XPOSE control.

1. Drag device, input source device and output device from the list on the left based on the field application. For example, drag X14 from Device, Laptop from Input and LDC from Output list as follows:



2. Click the icon  at the right bottom corner and open the setting interface as following:

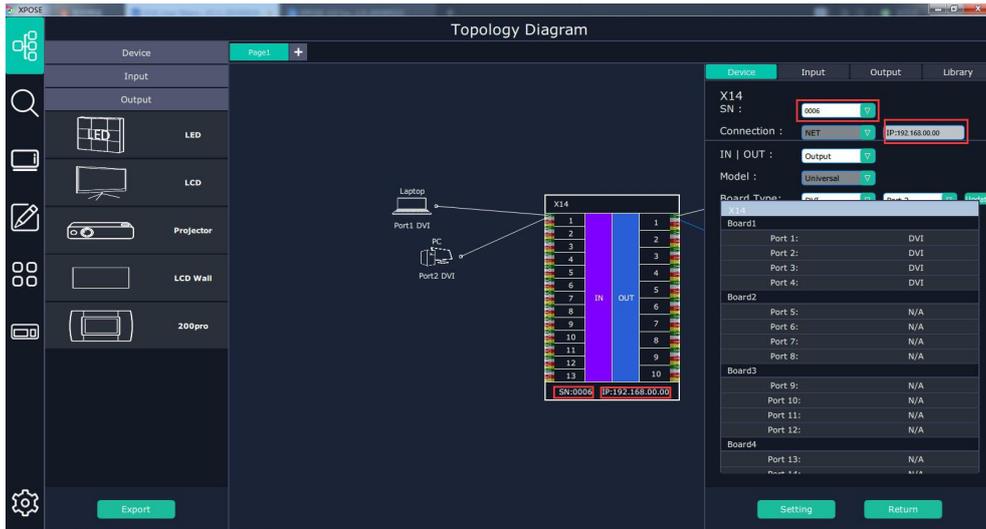
Device	Input	Output	Library
X14			
SN :	0006		
Connection :	NET	IP:192.168.00.00	
IN OUT :	Output		
Model :	Universal		
Board Type:	DVI	Port 2	Invite

- 2.1. After X14 is dragged into the topology diagram interface, users can find how many X14 devices currently linked in the same network from the drop-down arrow after SN.

Device	Input	Output	Library
X14			
SN :	0006		
Connection :	0006 NET	IP:192.168.00.00	
IN OUT :	Output		
Model :	Universal		

After one of the device is chosen, the device on the topology diagram shows the SN and IP address of the chosen one.





2.2 Choose board type of In and Out according to the topology diagram. For example topology diagram as follow:



Choose board type of In and Out as below:



3. After choosing board type, users can check the state in **Input** and **Output**



Device	Input	Output	Library
Input Name	Device Name	Port Index	State
Laptop	X14	Port 1	<input checked="" type="checkbox"/>
PC	X14	Port 2	<input checked="" type="checkbox"/>

Device	Input	Output	Library
Output Name	Device Name	Port Index	State
LCD	X14	Port 1	<input checked="" type="checkbox"/>
LED	X14	Port 2	<input checked="" type="checkbox"/>



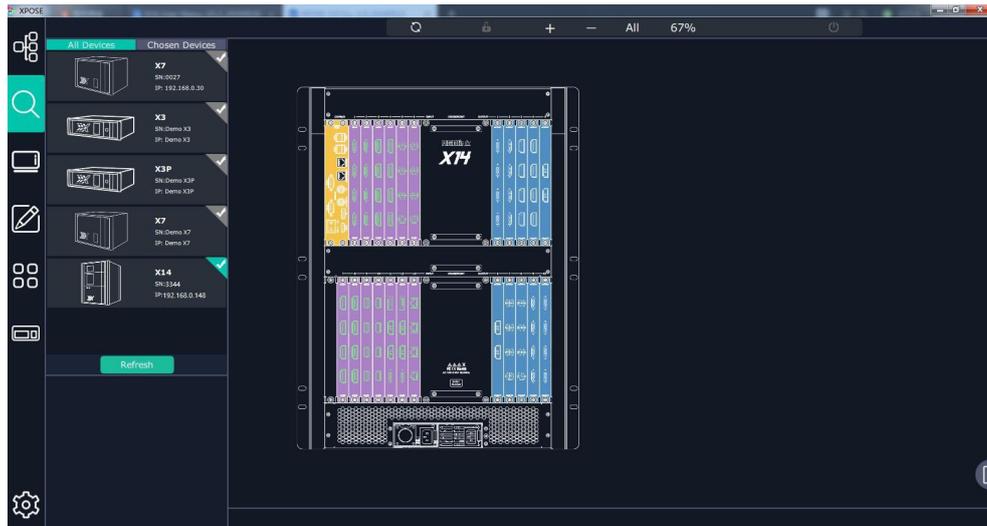
Output | Input | Overview

Connect the Device

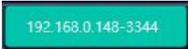
After Topology Diagram is finished, users can move to next step, the exact setting on each input and output board.

Click icon  and enter the operation interface.

First, choose the device from All Devices for example X14 SN:3344



Then click icon  behind X14 in **Chosen Device**, IP and SN of this device is shown on the left

top corner of the interface , which indicates that the device is connected to the computer and it can be operated by XPOSE2.0 from now on.

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Output Setting

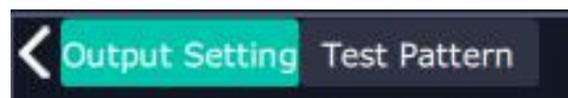
1. Click any output port in blue area, the board where the port locates is selected. Users can do settings to the board now.



A red rectangle flashes around the chosen port when it is clicked.

2.1 After DVI or HDMI board is selected, users can do the following settings in the edit section

after clicking  icon



2.1.1 Output Setting

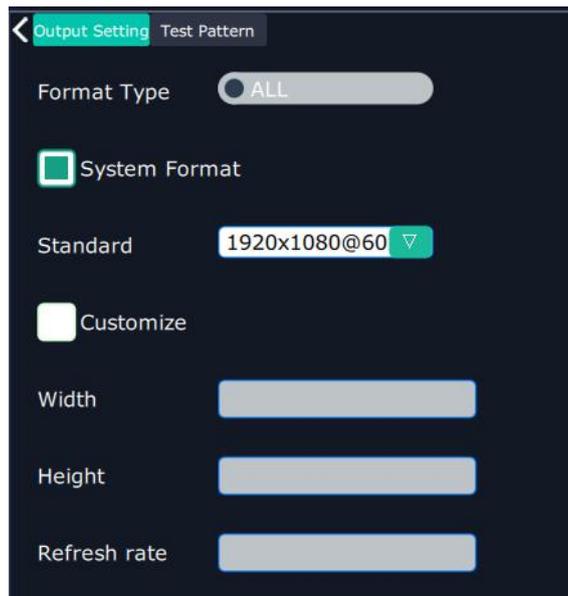
Format Type, select ALL or Module;

When Module is selected, 47 Normal resolution types available, the highest is 4096x2160@59.94 which only works on HDMI 2.0 board.



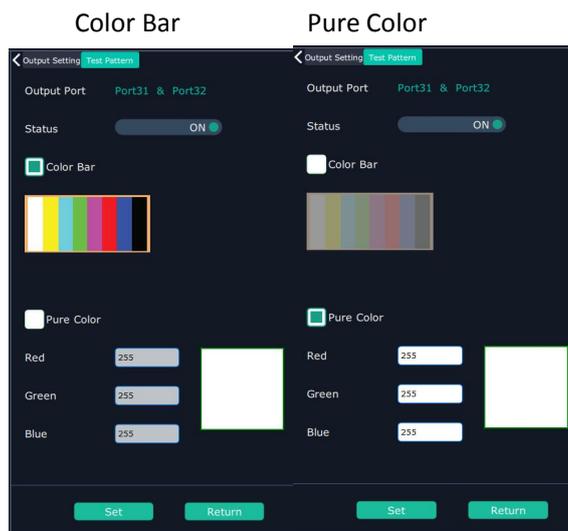
If ALL is selected, users can choose Standard resolution (the same as Normal resolution above) or Customize the resolution.





2.1.2 Test Pattern

slide ON/OFF the Status. After slide ON the test pattern, users can choose Color Bar or Pure Color as test Pattern.

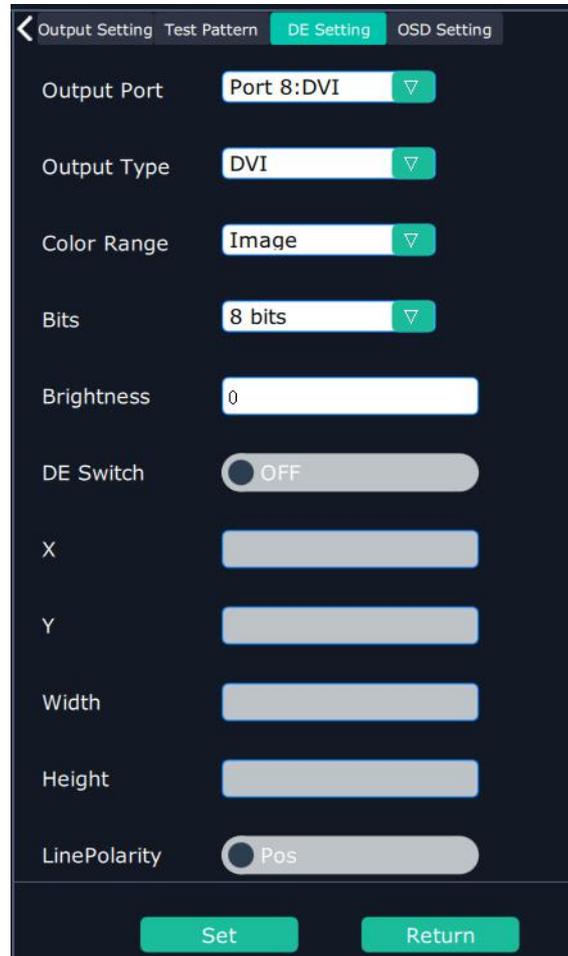


2.1.3 DE Setting

- Output Port: choose current port or Port All
- HDMI Output Type: DVI or HDMI
- Color Range: Image or Video
- Bits: 8 bits for DV, 8bits/10bits/12bits for HDMI
- Brightness: 0-128
- DE Switch: ON or OFF
- Switch ON DE to set X,Y,Width,Height,Line Polarity
- X: horizontal position



Y: vertical position
Width: horizontal size
Height: vertical size
Line Polarity: POS or Neg (Positive or Negative)



2.1.4 OSD Setting:

Output port: the current port

Status: ON or OFF

X/Y:the starting horizontal and vertical position

Width/Height:the horizontal and vertical size of the text

Font: font of the text,all fonts installed in the computer is available

Font Type: Normal,Italic,Bold,Bold Italic

Font size: 0-300 pixels

Pixel alignment: Left, Right, Center to Horizontal,Vertical Center Right, Align Bottom Right, Align left bottom, Vertical center left, Vertical center, Horizontal center bottom

Font Transparent,

Background Transparent

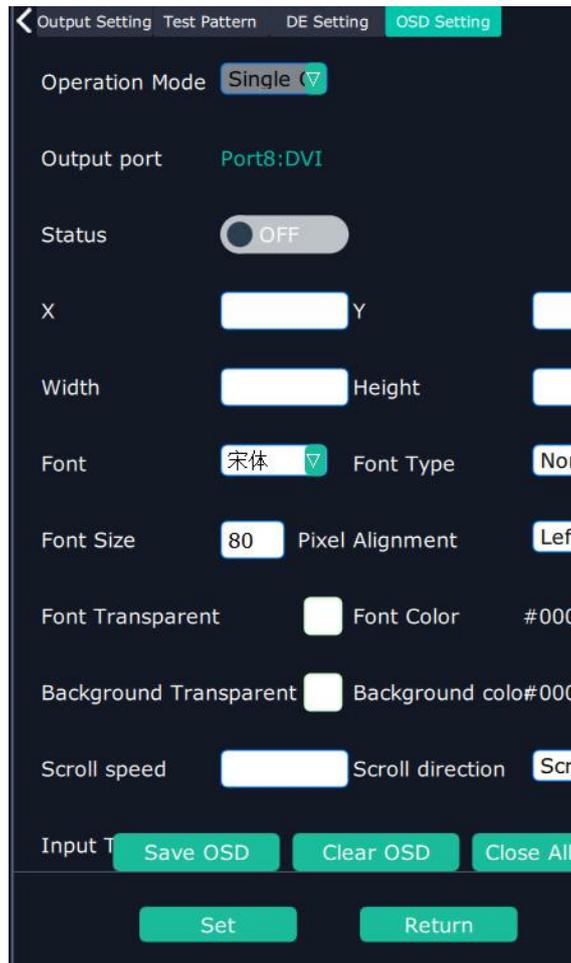
Scroll Speed: 0-16

Scroll Direction: Scroll Off, Scroll Left, Scroll Right

Input Text:The exact content of the text.



After setting, users choose Save OSD, Clear OSD (if the setting is not desired) or Close All OSD



Input Setting

1. Click any input port in purple area, the board where the port locates is selected. Users can do settings to the board now. A red rectangle  flashes around the chosen port when it is clicked.





2.1 When DVI board is chosen, Property,DSK Setting,EDID Setting,LOGO,Source Merge could be done.

2.1.1 Property

Input Port: Current port

Scale

X/Y: Vertical and horizontal position

Width/Height: Vertical and horizontal size

Crop:

Left:crop left

Top:crop top

Width:horizontal size after crop

Height:vertical size after crop

Display mode: Live or Freeze

Picture Adjustment

Mirror: ON or OFF

Alpha: transparency adjustment, range from 0~128.

Mini Delay mode:On or Off. Select this mode on the output and input pixel ratio is 1:1.Under this mode, the image is under the best state.

Saturation: slide to adjust

Hue: slide to adjust

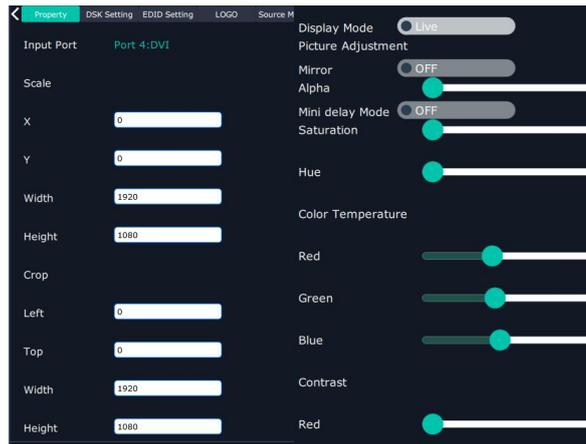
Color Temperature

Red: Slide to adjust

Green: Slide to adjust

Blue: Slide to adjust





Contrast

Red: Slide to adjust

Green: Slide to adjust

Blue: Slide to adjust

2.1.2 DSK Setting:

Input Port: Current Port

Preset: Customize, White on Black 1, White on Black 2, Black on White 1, Black on White 2, Green on Black 1, Green on Black 2, Green on White 1, Green on White 2, Red on Black 1, Red on Black 2, Red on White 1, Red on White 2

DSK Setting switch: On or Off

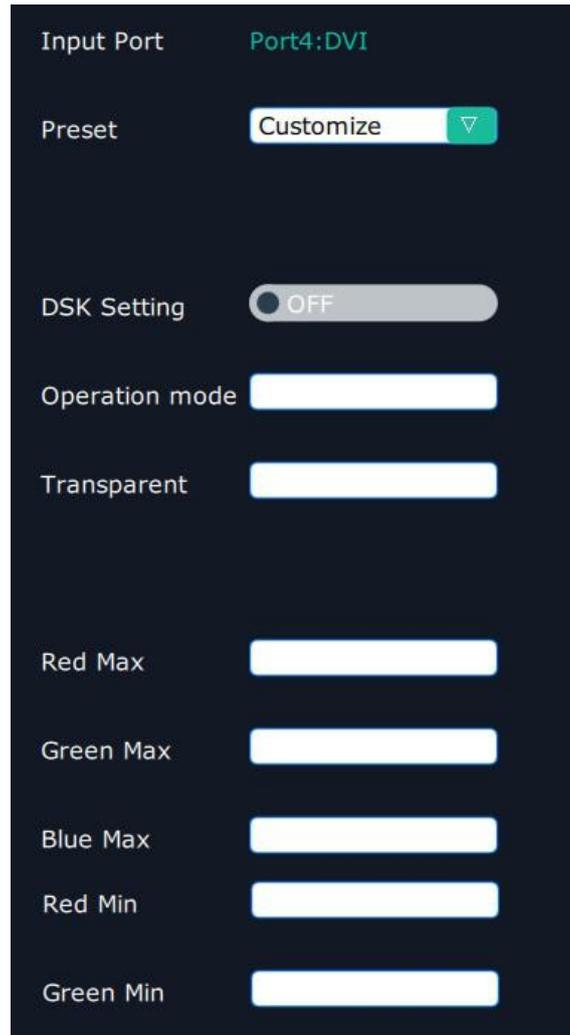
Operation Mode: 0 or 1, automatically show according to user's Preset choice

Transparent: 0-255, automatically show according to user's Preset choice

Red, Green, Blue Max: 0-255, automatically show according to user's Preset choice

Red, Green Min: 0-255, automatically show according to user's Preset choice





2.1.3 EDID Setting

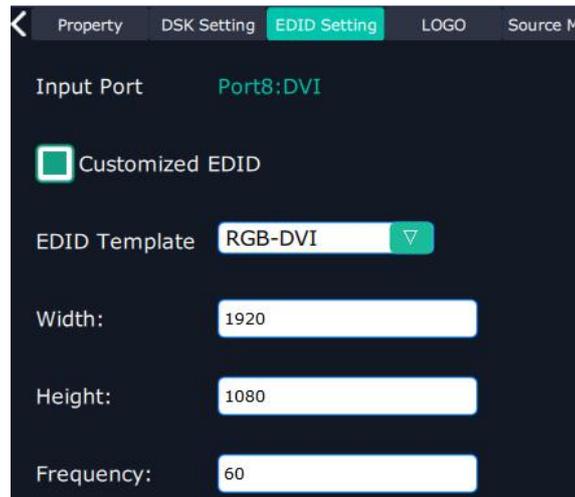
Input Port: Current Port and type

Customized EDID

EDID Template : RGB-DVI and RGB-HDMI to choose

White Height Frequency: automatically show current port.





2.1.4 Logo

Input Port: Current Port

Select **Logo capture** or **Set Logo**

Logo Capture

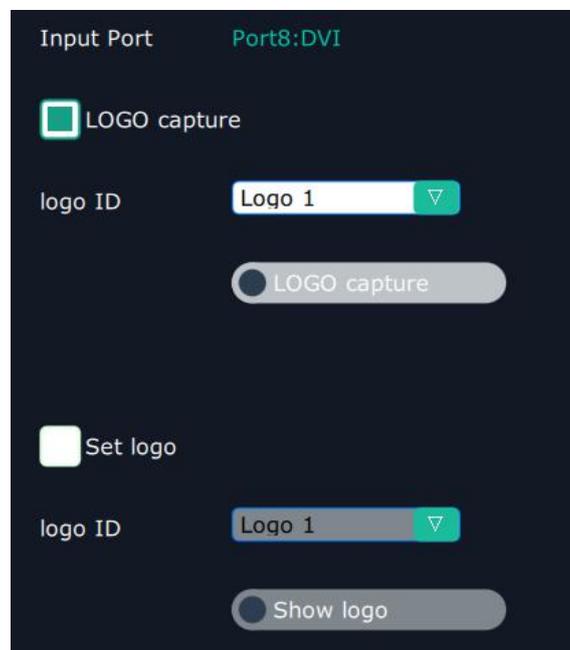
Logo ID: select from Logo1-Logo10

Slide to enable Logo capture

Set Logo

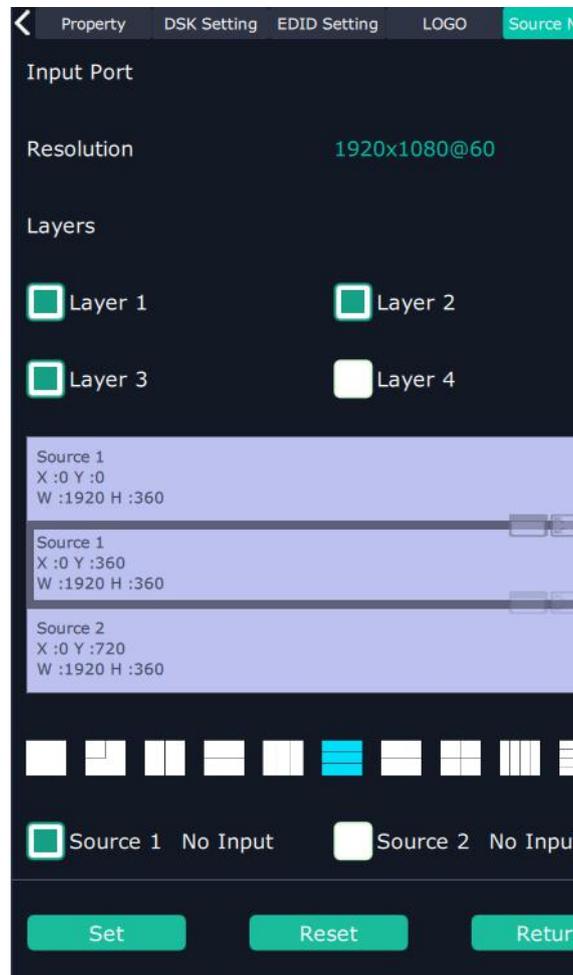
Logo ID: select from Logo1-Logo 10

Slide to enable Show Logo



2.1.5 Source Merge

Source merge is used to merge input sources on the same input module, and combine the inputs to display in the same layer, with different layout.



Resolution: resolution of current input source

Layers: up to 4 layers (choose layers first, layers depending on how many pictures need to show on one display)

Merge patterns (choose merge patterns after layer number decided)



Click the layer to select it



then select source 1 source 2 to change the content of this layer.





2.2 When HDMI port is select, users can do setting of Property and EDID

2.3When SDI port is select, users can do setting of Property , DSK, LOGO and Source Merge.



2.4When USB port is selected, Property and USB setting could be done.

2.4.1USB Setting:

Input Port Current USB port

Select **Video** or **Image**

Choose Video, will list down the media files in video format by index.

Set play loop by , switch to previous , next  and stop  playing

Choose Image, will list down the media files in graphic format by index.

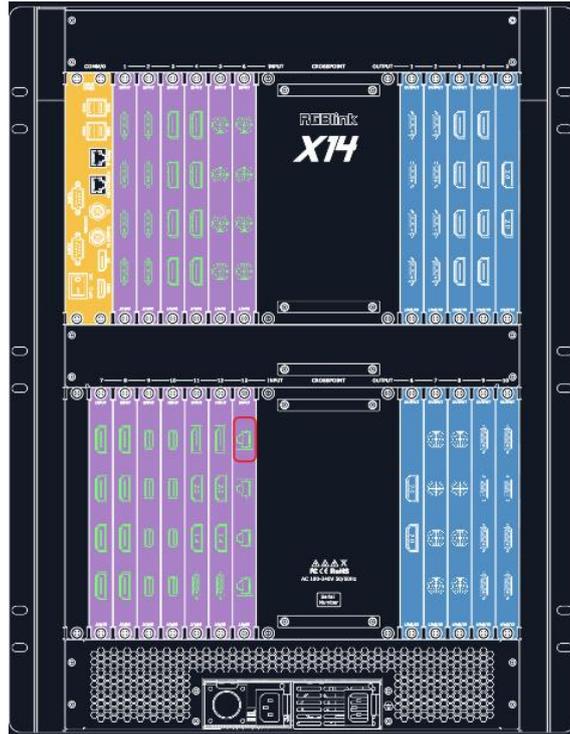
Set playing time from 0 to 255S.

Note: the time setting is only enable when User select Image



2.5 Select H.264 input port as the picture





Property could be set:

Input Port: Current port and type

Scale: set position (X,Y) ,and size (Width,Height)

Crop: set starting position (X,Y) ,and size (Width,Height)



Property

Input Port **Port 28:H264**

Scale

X

Y

Width

Height

Crop

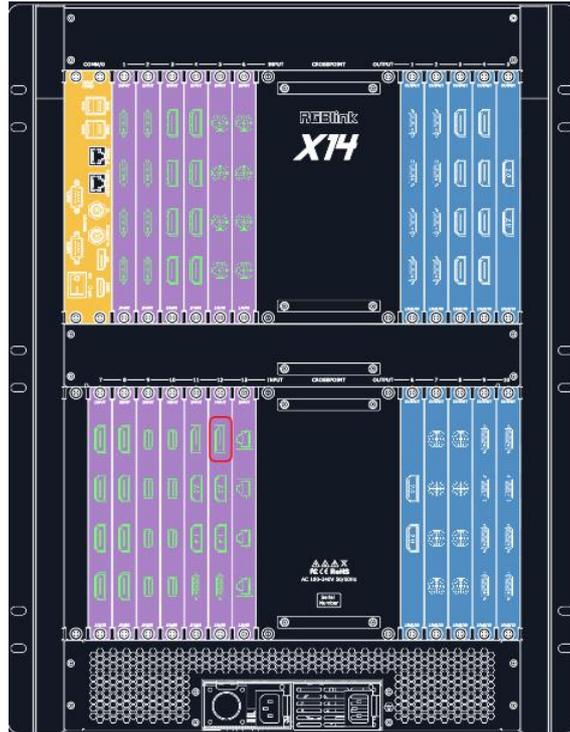
Left

Top

Width

Height

2.6 Select any port on 4K@60 board.



There comes Property,4K Setting ,EDID Setting

2.6.1 EDID Setting

Input Port Current Port and Type

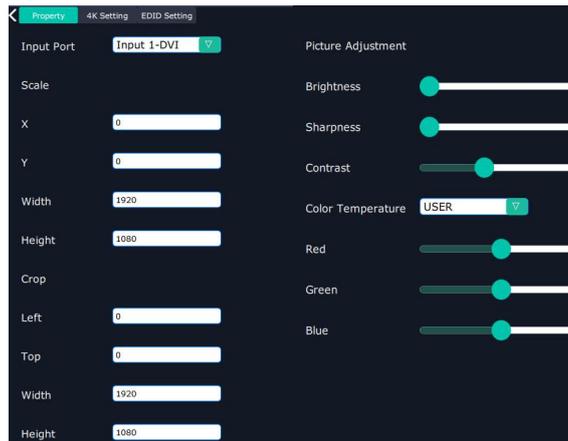
Customized EDID

EDID Template: RGB-DVI or RGB-HDMI

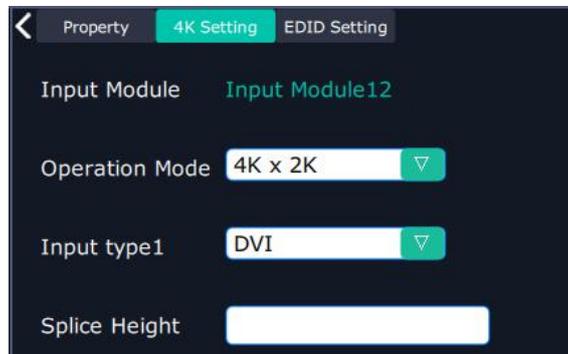
Width, Height, Frequency:current

 The screenshot shows a software interface for configuring EDID settings. The 'Input Port' is set to 'Port7:DVI'. The 'Customized EDID' checkbox is checked. The 'EDID Template' is set to 'RGB-DVI'. The 'Width' is set to 1920, the 'Height' is set to 1080, and the 'Frequency' is set to 60.


2.6.2 Property



2.6.3 4K Setting



Input Module: current module position

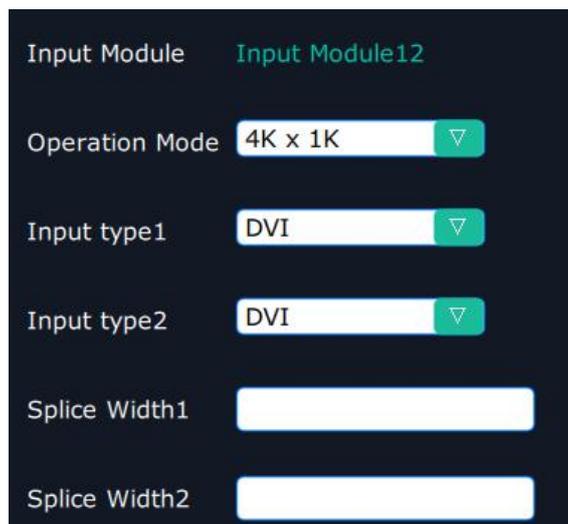
Operation mode:4K x 2K, 4K x 1k, 2K x 1K, PIP

4K x 2K

Input type 1: select from DVI, HDMI and DP

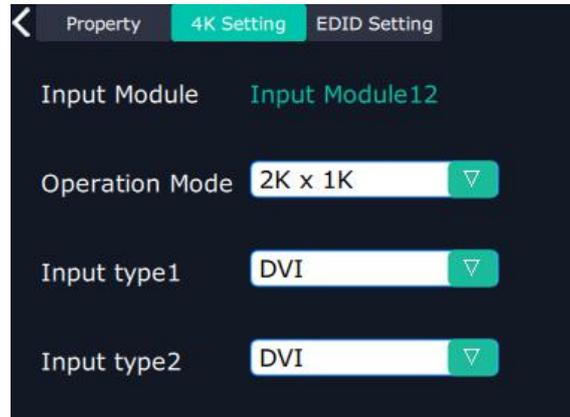
Splice Height: no more than 2160

4K x 1K

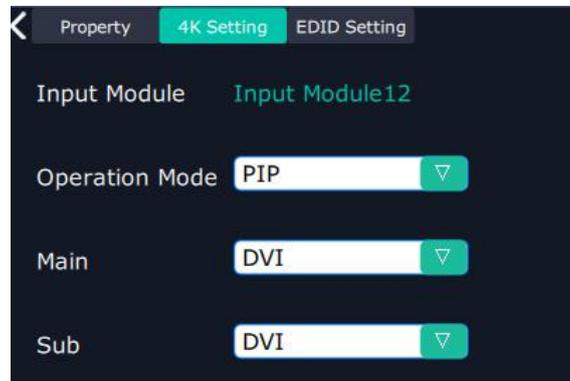


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Input type 1 & Input type 2: select from DVI, HDMI and DP
Splice Width 1& Splice Width 2: no more than 10000
2K x 1K



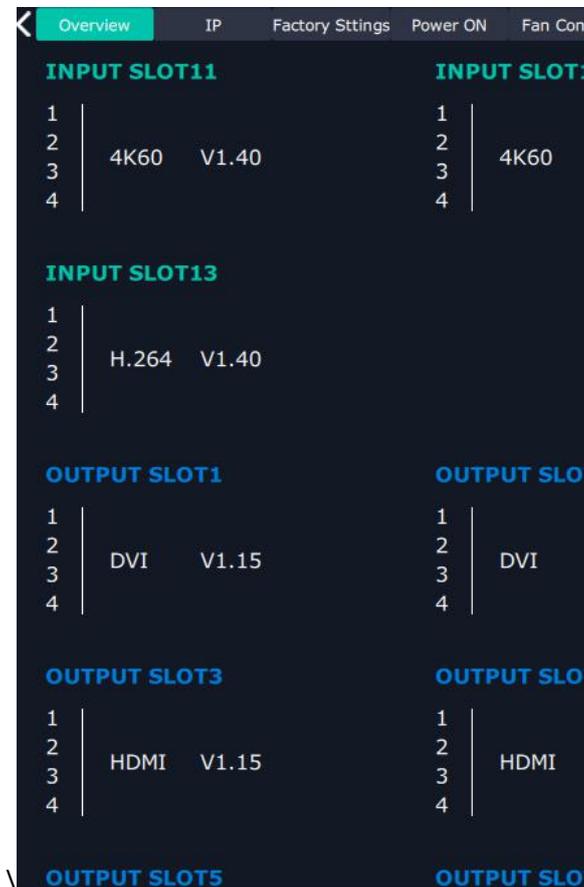
Input type 1&Input type 2: select from DVI, HDMI and DP
PIP



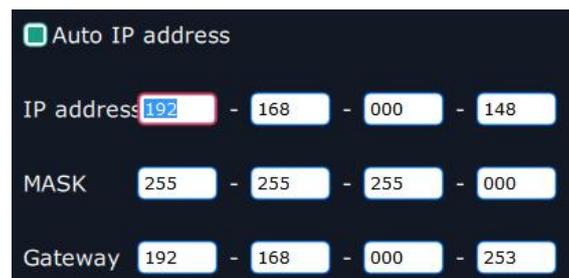
Select Main and Subsidiary picture from DVI,HDMI,DP

Device Overview

Click Return Return, there are overview, IP setting, Factory Setting, Power ON, Fan Control
Overview show Device Info, board info in each slot.



IP: select Auto IP address or manually type in the IP address, MASK and Gateway

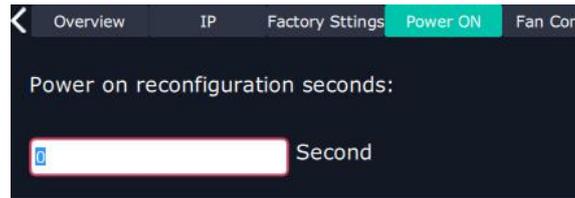


Factory setting: Remove Logo and/or Remove EDID



Power on: 0-255S





Fan Control: Auto adjustment,Fan speed 0-99



Display System

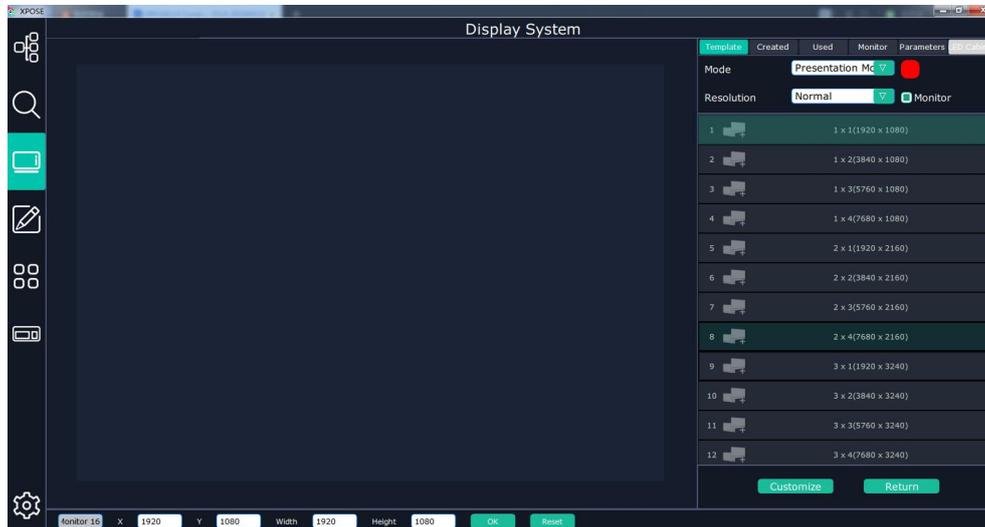
Display System is for users to set layout of outputs.



Click this icon first and then click



enter the interface as follow:



Template:

There are 16 types of basic “Display Area” which is used to contain output interface, and could be regarded as layout of output.

Mode:

At present, there are Presentation Mode, PST+PGM Mode, Matrix|Aux, Rotation Mode and Edge Blending. Rotation and Edge blending is valid only when ARO rotation module is installed to the device.

XPOSE2.0 allows multiple modes running on one same interface, to differentiate each mode, different color is given to each mode.

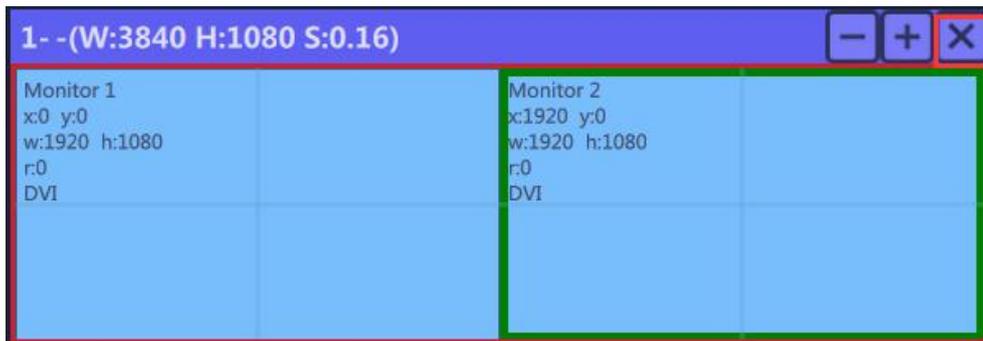


Click this icon  to cancel the monitor in Display Area

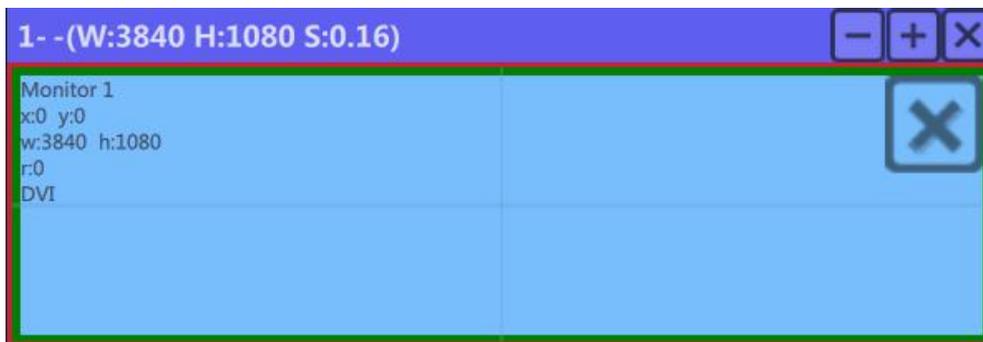




Long pressing this icon  to cancel the Display Area

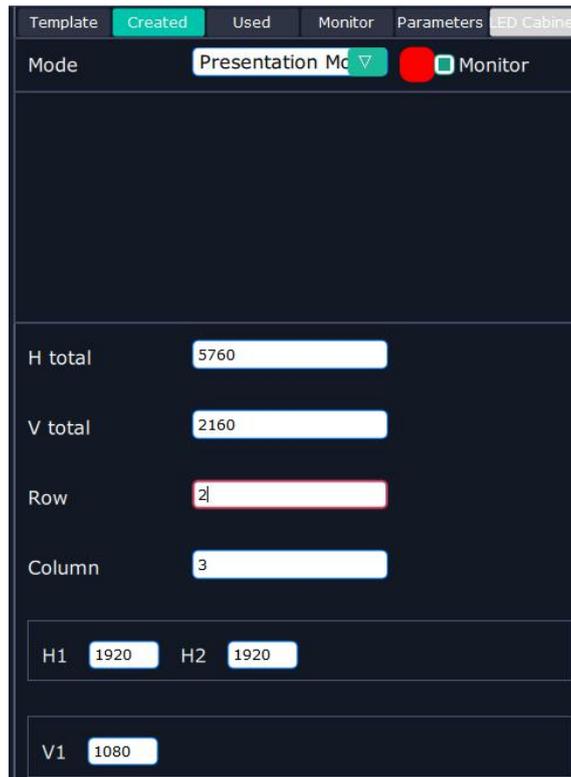


Use the bar under the interface and type in the parameter to set resolution and position of monitor



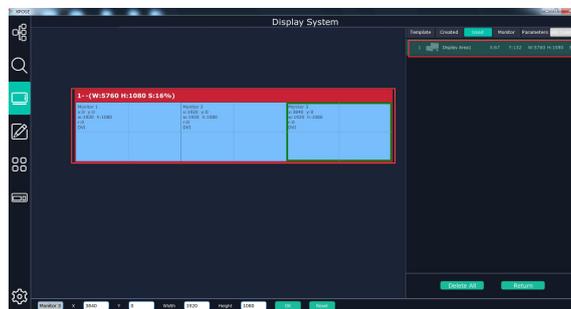
Created: Click Customize  below template, user can type in the width, height, Row and Column, according to actual display in field. It will automatically calculate the width and height of each monitor based on the parameter above.





Used:

Show the already used “Display Area”, all the used “Display Area” can be kept unless users “Delete All”



Monitor

Show all the output ports (monitors) of this device. If the monitor is in dark (black), it indicates that this monitor is used, otherwise it is in grey.



Template	Created	Used	Monitor	Parameters	LED Cabinet
1			W:1920 H:1080 R: 0		
2			W:1920 H:1080 R: 0	Used	
3			W:1920 H:1080 R: 0		
4			W:1920 H:1080 R: 0		
5			W:1920 H:1080 R: 0	Available	
6			W:1920 H:1080 R: 0		
7			W:1920 H:1080 R: 0		

Parameters

It is designed to adjust the size and position of monitor. Under the mode of Presentation, PST|PGM, Matrix|Aux, Parameter works the same as the bar under interface.

Monitor 3 X 3840 Y 0 Width 1920 Height 1080 OK Reset

Parameter under the mode of Presentation, PST|PGM, Matrix|Aux mode

Index Monitor 3

Basic Setting

X 3840 Y 0

Width 1920 Height 1080

But under Rotation and Edge Blending mode, they are different.

Parameter under Rotation Mode and its monitor

Parameter of Monitor Width, Height, Up Down Left Right Border are to set the overall monitor Display Area, not not single monitor, but the bar under is for single monitor.

Area:25 X 10912 Y 1401 Width 1920 Height 1080 Angle 0 OK Reset



Parameter under Edge Blending Mode

BoardIndex	9		
OutPut 1	R: 100	G: 100	B: 100
OutPut 2	R: 100	G: 100	B: 100
OutPut 3	R: 100	G: 100	B: 100
OutPut 4	R: 100	G: 100	B: 100

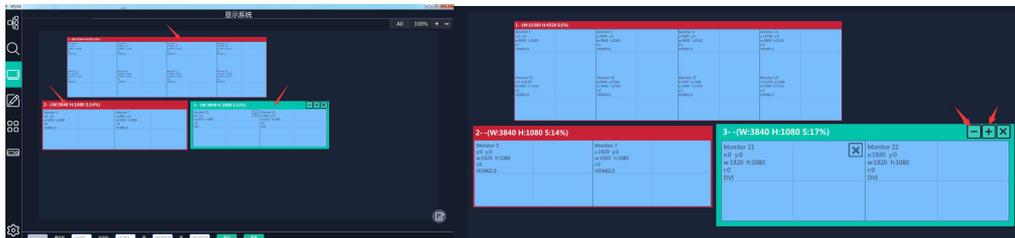
Parameter here is to set the RGB value of each output port of Rotation board but bar is still the bar is still for single monitor.

y Area:25	X	7370	Y	1615	Width	1920	Height	1080	OK	Reset
-----------	---	------	---	------	-------	------	--------	------	----	-------

Adjust Display Area

Drag the boarder of the display area to move its place in the interface.\

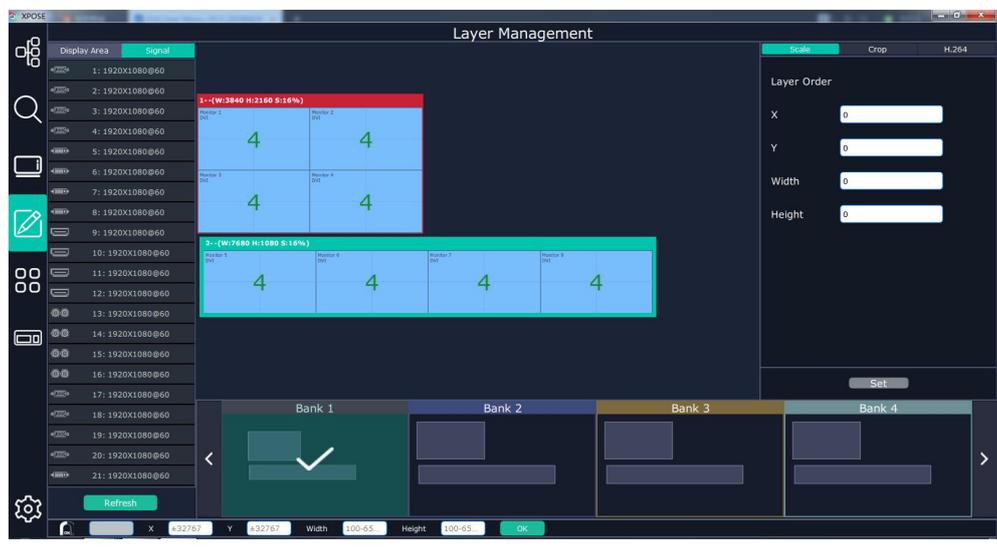
Click icon  to shrink, Click  to enlarge the proportion of display area on interface.



Layer Management



Layer Management is designed to manage the layer of each monitor. Click this icon to enter the interface:



Display Area Display Area



Here is to show all the Display Area set in previous step System Management. Click to cancel or use the corresponding Display Area.

Display Area	Signal
1	Display Area1 ✓
2	Display Area2 ✓
3	Display Area3 ✓

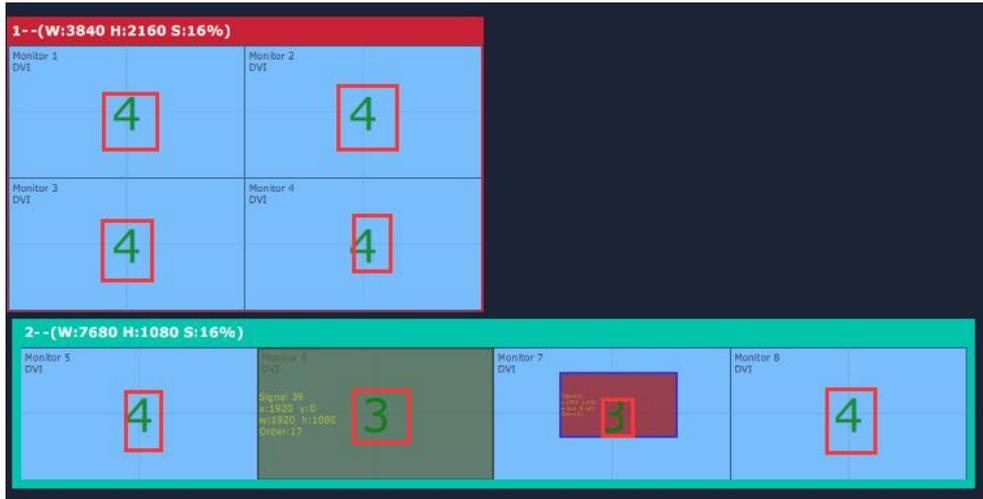
Signal Signal

To show the signal list of 52 inputs. Drag source from signal list to monitor

Numbers on Monitor

Numbers on monitor is to show how many layers at present allowed to put in the monitor . Each monitor (output port) can contain layers no more than 4. Any 1 input signal cross 1 border of a monitor is regarded as 2 layers.





Layer Adjustment

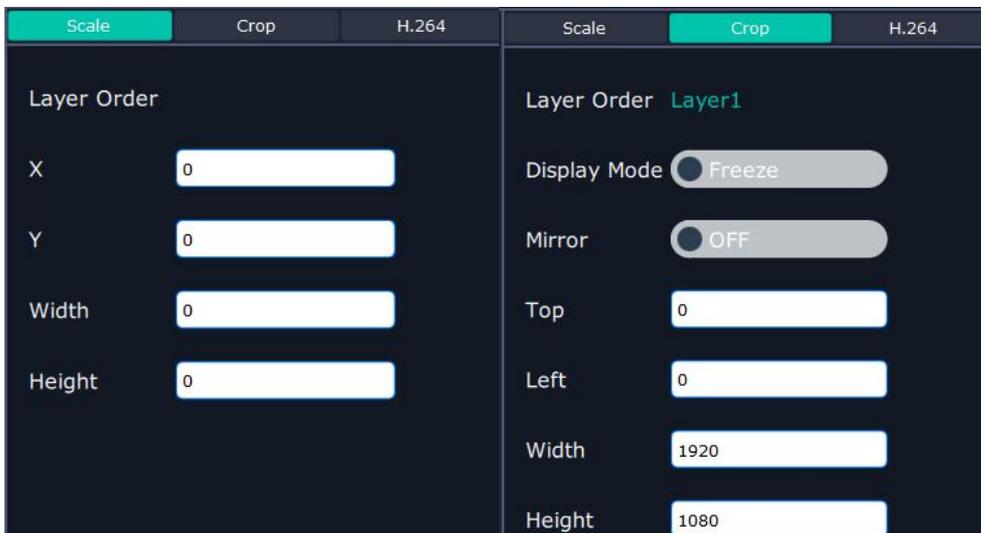
Under the Presentation Mode, there are two ways to adjust layer.

1. Use the bar under the interface

Choose one layer and the bar shows its signal source, type in position and size.



2. Layer Scale or Crop



Layer Movement

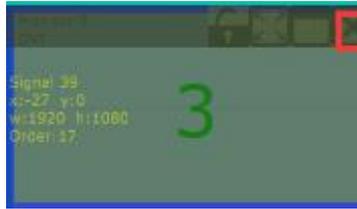
Place the cursor on the layer, it turns to a palm icon  , press the left of mouse, the icon turns

to a fist  , moving the mouse can drag the layer.



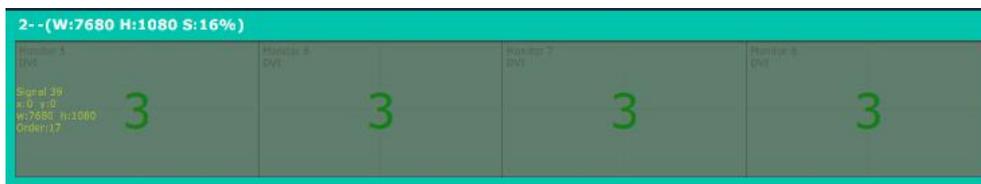
Layer Remove

Click the cross on the top right of the layer to remove the layer if needed.



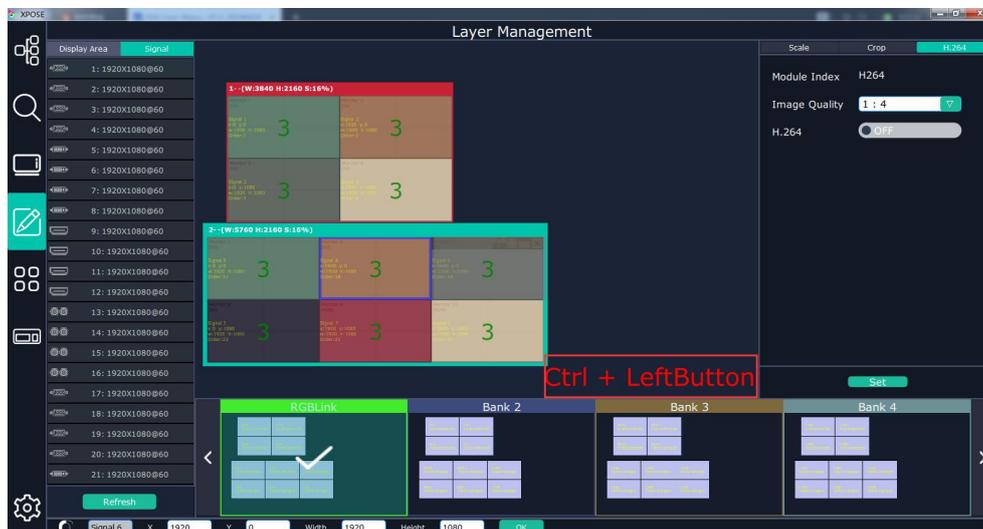
Layer Max

Click this icon , to cover up all monitors in the same Display Area with the one signal, as the following:



Layer Copy

Press Ctrl and mouse left at the same time, move the mouse the layer selected can be copied and place in any monitor in the same Display Area but it doesn't work when cross over display area.



Layer Lock

Click the lock icon on the right middle of the later boarder.





When the layer is locked, any movement or removal to the layer is invalid

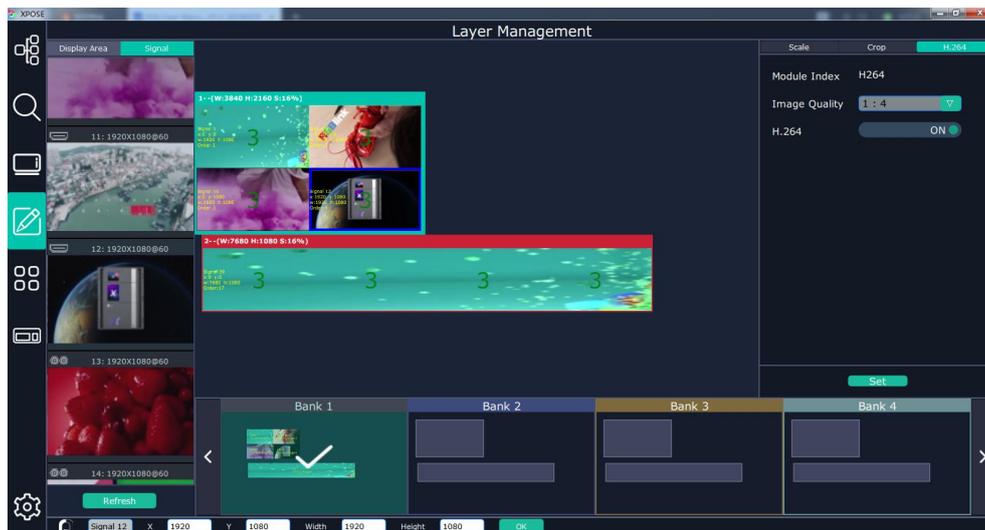
H.264 H.264

Slide H.264 to ON

All input images can be viewed on XPOSE interface.

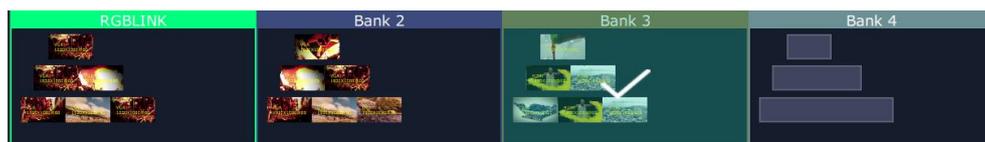
Module Index: H.264

Image Quality: to choose from 1:1,1:2,1:3,1:4,1:5,1:6, the higher the ratio is the better the preview image is but if band width of network is not good enough, high ratio image quality may cause problem. We usually suggest user to choose 1:4 as the attached picture.



Save to Bank Automatically

When one Bank (where the set is contained) is finished, click next Bank, previous set is saved to bank.

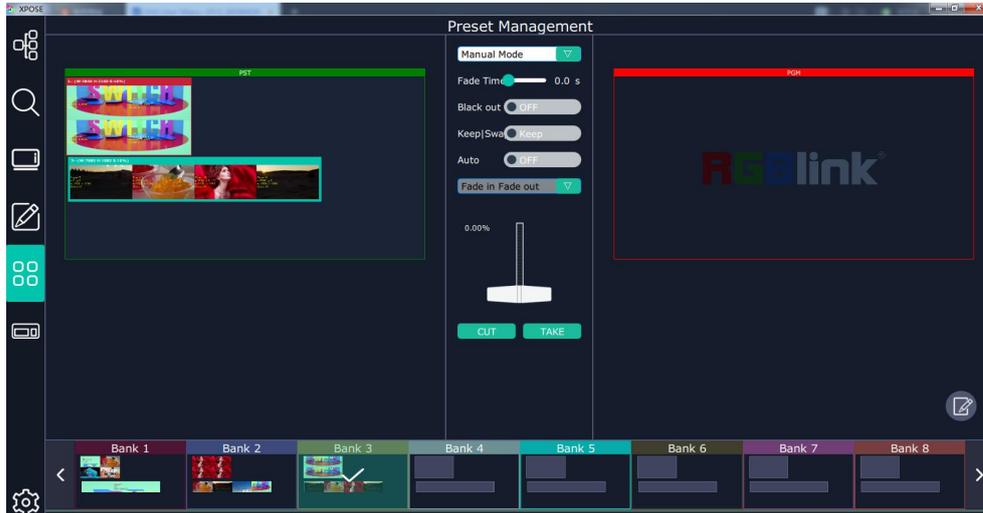


Preset Management



Preset Management is designed to switch bank (scene setting done in last step).

Preset Management Mode: 1 Manual Mode, 2 Schedule Mode



Manual Mode

Fade Time 0.0-10.0S

Black out, slide to ON or OFF

The tick on the bank indicates that the bank is selected.

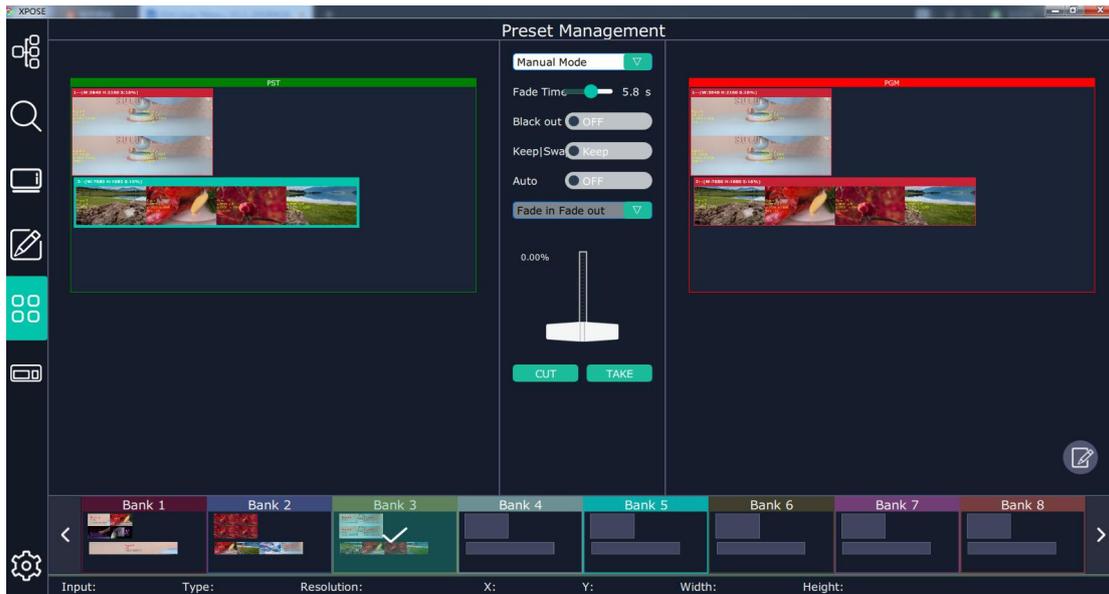


Click Cut or TAKE to switch the content on PST to PGM.

Cut is to switch without any transition.

Take is to switch with the fade time set above





Auto

If there are more than 1 computer are controlling the same X14 with XPOSE, slide Auto to On, the operation on the current computer can by synchronized to the other computer.

Keep|Swap

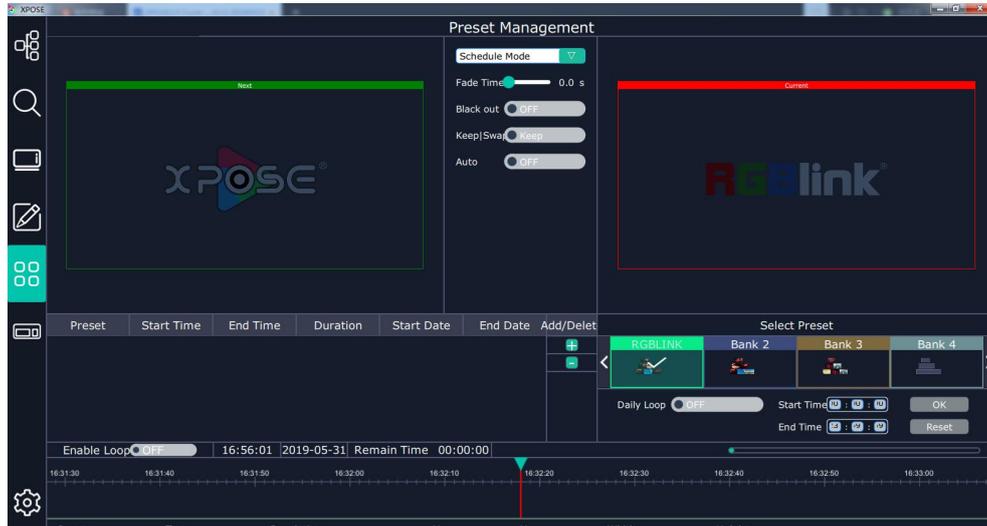
Under the **Keep** status, users need to select a bank and use Cut or Take to switch image from PST to PGM.

Under **Swap** status, users select a bank, then use Take or Cut to swap this bank and the bank before this one.



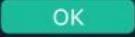
Schedule Mode

This mode is designed to set auto bank (scene/preset) switch.



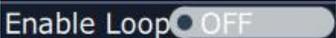
Loop

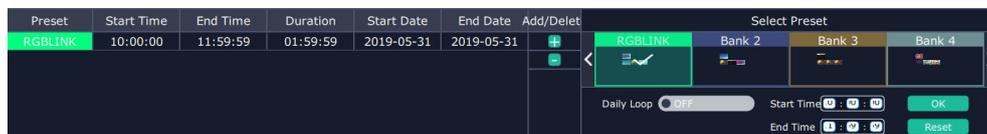
Click  under **Add/Delet**, select a bank and set Start Time and End Time.

Click OK , the bank will be added to the loop list on the left.

Enable Loop to On 

Long pressing  to remove the bank from loop list when loop is OFF

 (Note, Loop need to be disabled first, if a bank need to be removed from loop list)



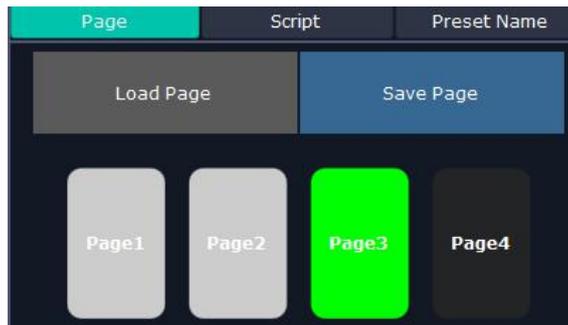
Bank Save and Load

Save Bank to Page

Select a bank,click Page,select Page X,the bank is saved in the page.

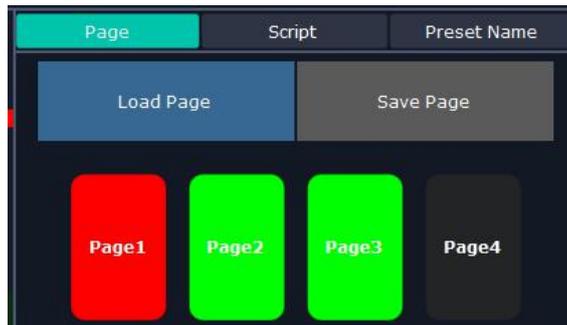
The page turns green then become grey, indicating the bank is saved in the page.





Load bank from Page

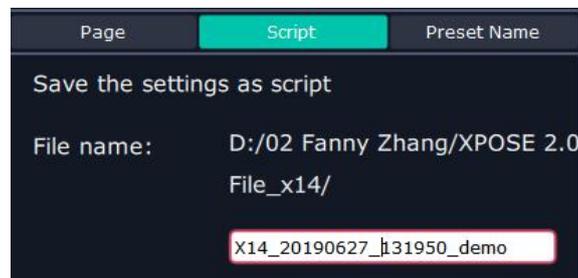
Click Load Page, pages with bank saved are green, select one from them and the selected one becomes red. The bank is loaded from page to PST.



Script Save and Load

Save Script

Click , fill in the blank with the name of setting and Save



Load and Delete Script

After the script is saved, the bank name will appear in the load list.

Select the file and click Load

Select the file and click Delet, the chose file can be deleted from list.



Load script		
File name	Date modifie	File size
X14_20190627_131950_den	2019/06/27 13:18	135KB

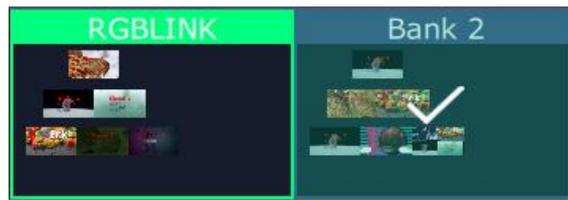
Preset Name

Select a bank and click Preset Name , fill in the blank after New Preset Name to rename a Preset (Bank)

Click the color block after Color Selection and choose a new color for the boarder of chosen bank.

Page	Script	Preset Name
Current Preset Name	Bank 2	
New Preset Name	<input type="text"/>	
Color Selection:	<input type="color"/>	

For exmaple change Bank1to RBGLINK, with green boader



Keyboard Setting



Keyboard setting is designed to fit for different operation systems such as Windows and Mac. Users can set short cut keys for Input, Output, Layer and Preset.



Drag Input, Output, Layer and Preset from the list to the keys you desired as follow:

Input, Output, Layer and Preset.

Please note the keyboard area where allows to set short cut keys as follow:



If the setting goes wrong or no need for short cut keys any more, click  to clear some keys or clear all.

Clear: is to clear some keys, the keys need to selected before hand.

Clear all: is to remove all already set short cut keys.



Keyboard Set Script Set

Save the settings as script

File name:

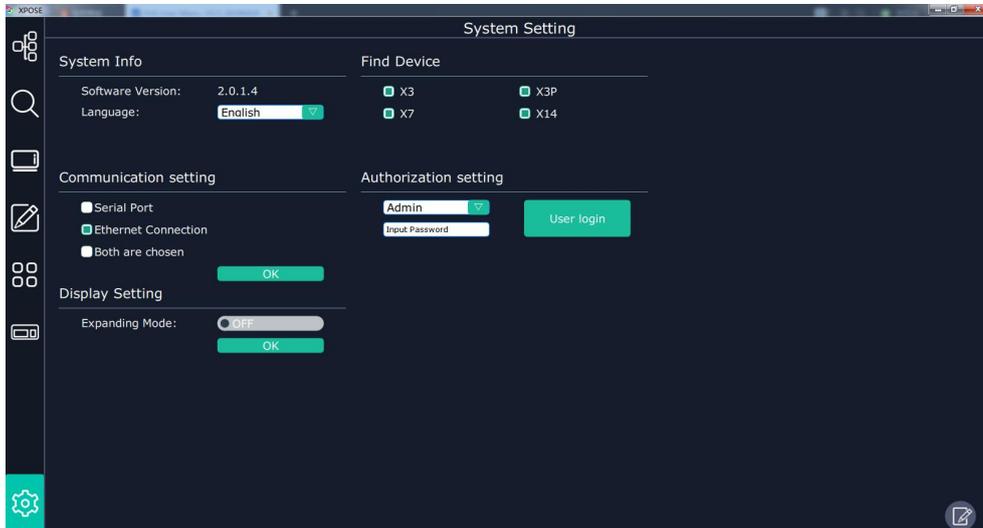
Clear Info



System Setting



Click this icon and enter the interface



System Info, Software Version and Language options with English and Russia to choose.

Communication Setting, this is to decide how XPOSE to communicate with the device

By serial port, ethernet connection, or both are chosen

Find Device: choose the devices that users need to be connected

Authorization setting: type in the password and to set up subordinate user's authorization.

Display Setting: Slide Expanding Mode to On, 16 displays can be viewed on XPOSE.



Slave Unit:

Slave Unit is to control multiple devices simultaneously, which are connected to same network.

(“In the same network” means the the the third section in the IP address digits are the same)

XPOSE do operation on one device, same operation synchronized to other devices. For example, there are two devices linked to the same network, one with IP IP192.168.0.112 SN 0027, the other 192.168.0.129 SN 3344 as followed:

If users need to back up operation from current running device 3344 to 0027, slave unit shall be used. First fill in the quantity of to be linked devices, click Set Numbers, Index, Device IP and State will come up.

Fill in the blank with the IP address of the other device, e.g 0027,IP192.168.0.112 and click **ON**

ON, the red dot  behind turns to green  indicating that the device has been connected

Click **OFF** **OFF**, the connection is cut off.



CONTACT INFORMATION

Warranty:

All video products are designed and tested to the highest quality standard and backed by 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.

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