

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 pixles 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**

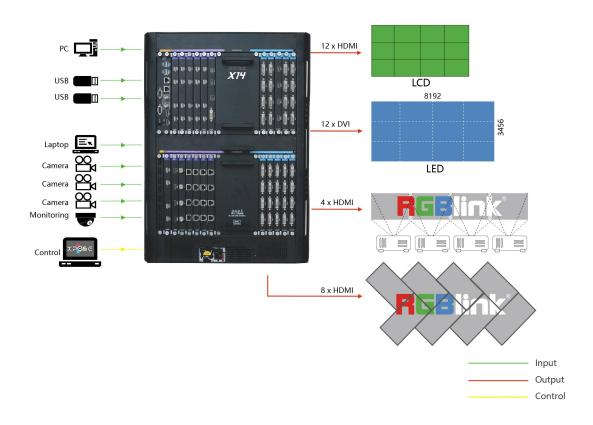
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Product Introduction

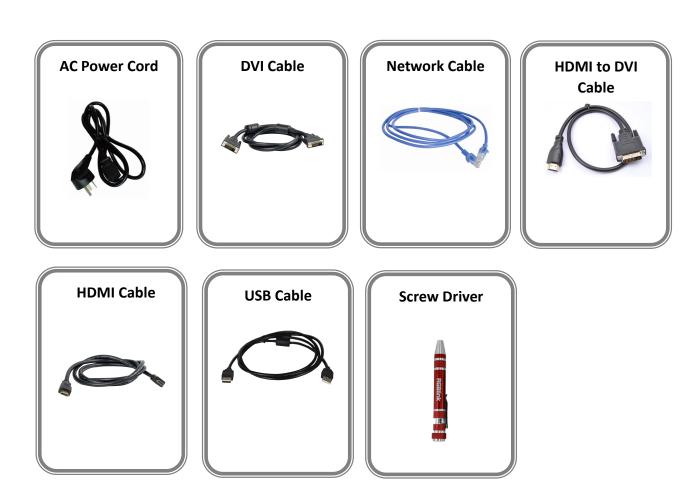
For entire video display systems, X14 brings a new level of efficiency, capability and control. Supporting up to massive 52 inputs and up to 40 outputs, X14 truly brings together large videos systems for system-in-box approaches to video presentation and integration. Modular throughout RGBlink technologies 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



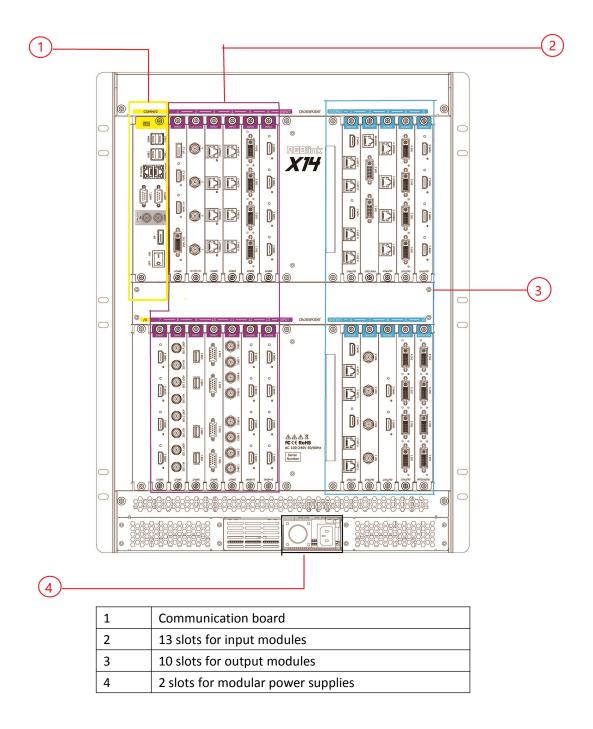
Note:

AC Power Cable supplied as standard according to destination market. USB is contained on the Warranty/Registration Card. Please keep.



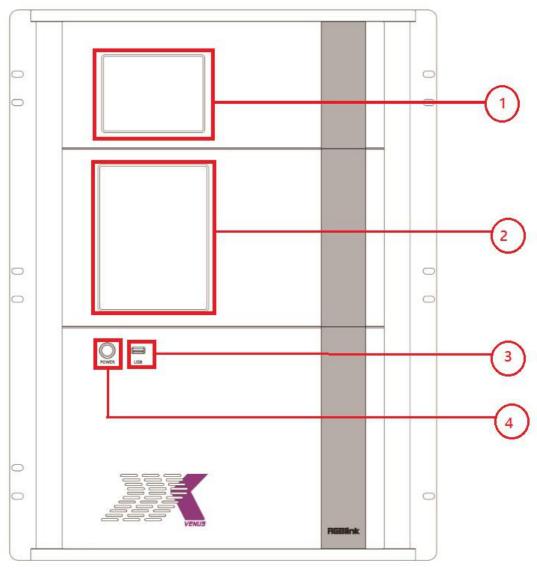
Hardware Orientation

Back Panel





Front Panel



	5.6 Inch TFT-LCD Display
1	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	<u>USB 2.0</u>
	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.



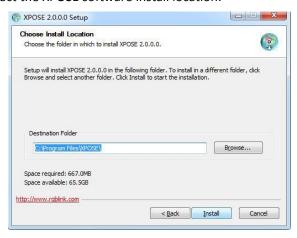
Click "Next" to install:



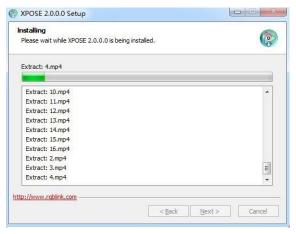


Click

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



Click "Install":

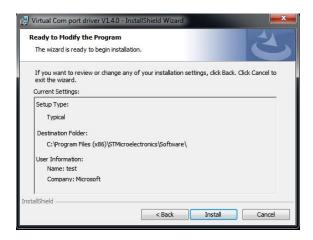


During installation, it will pop up the window of Install Shield Wizard for Virtual Com port:

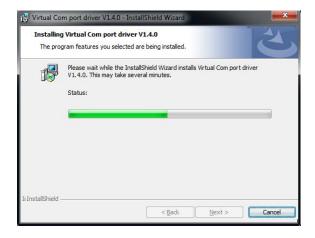




If user install the XPOSE software for the first time, click "Next

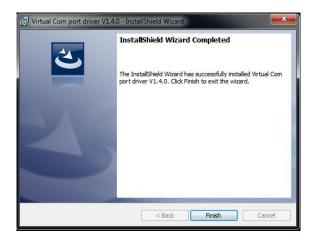


Then click "Install", as shown in the figure below:





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

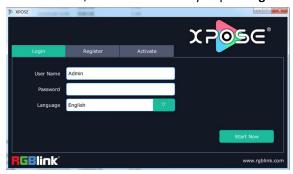




an email from RGBlink Registrations will be sent to the Register email address.



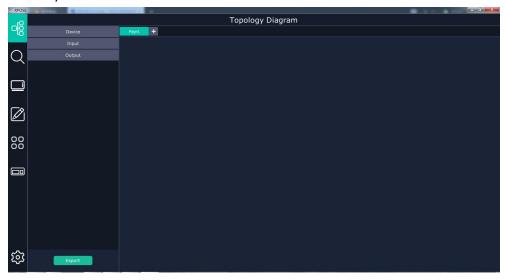
Type in the activate code and confirm, it will automatically skip to Login



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.



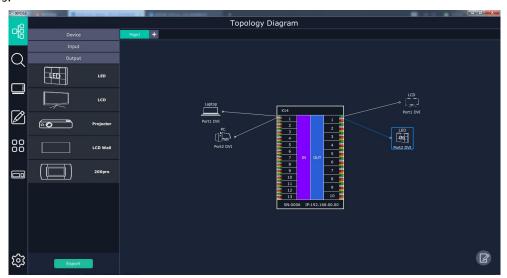
In the following text, we are going to take XPOSE 2.0 control X14 as example to illustrate how to use XPOSE 2.0.



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:



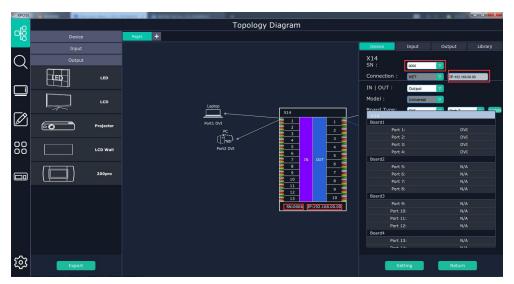
2. Click the icon at the right bottom corner and open the setting interface as following:



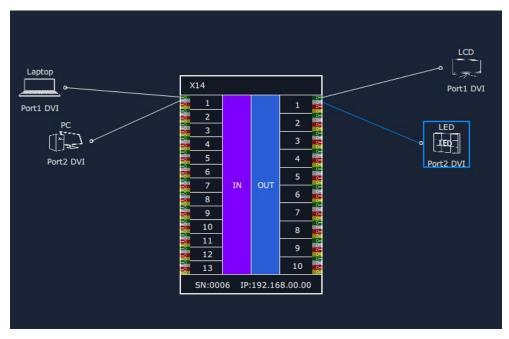
2.1. After X14 is dragged into the topology diagram interface, users can find how many X14 devices currently linked in the same network from the drop-down arrow after SN.



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









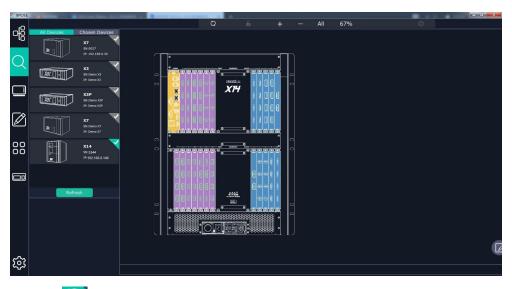
Output | Input | Overview

Connect the Device

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

Clich icon and enter the operation interface.

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

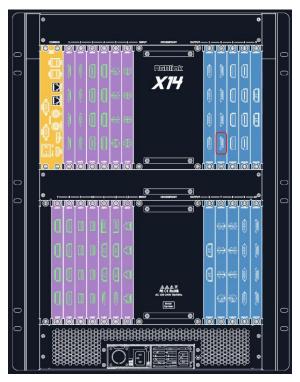


Then click icon behind X14 in **Chosen Device**, IP and SN of this device is shown on the left



Output Setting

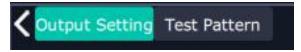
1. Click any output port in blue area, the board where the port locates is selected. Users can do settings to the board now.



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





2.1.1 Output Setting

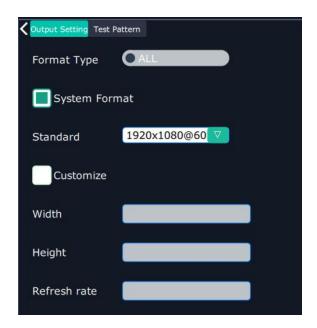
Format Type, select ALL or Module;

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



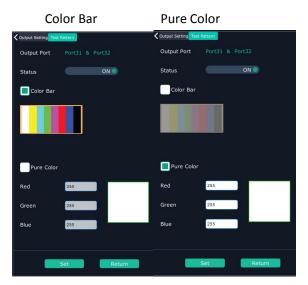
If ALL is selected, users can choose Standard resolution (the same as Normal resolution above) or Customize the resolution.





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

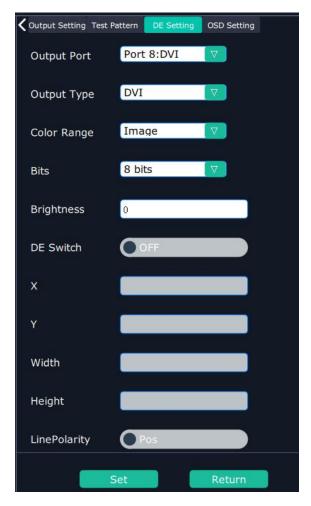
Switch ON DE to set X,Y,Width,Height,Line Polarity

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.

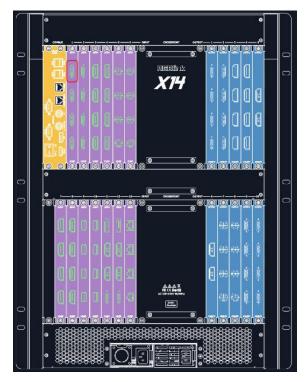




Input Setting

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 borad 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.

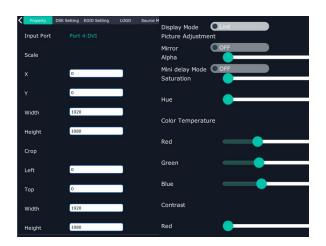
Mini Delay mode:On or Off. Select this mode on the output and input pixel ratio is 1:1.Under this

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

2.1.2DSK Setting:

Input Port:Current Port

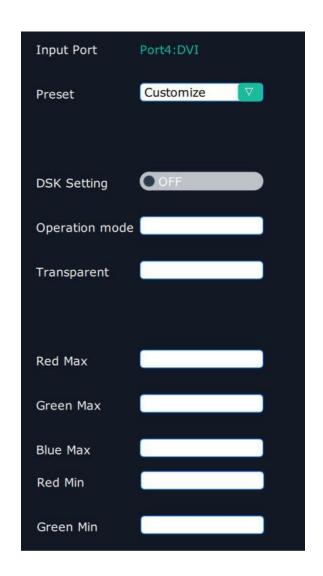
Preset: Customize,White on Black 1,White on Black 2,Black on White 1,Black on White 2,Green on Black 1,Green on Black 2,Green on White 1,Green on White 2,Red on Black 1,Red on Black 2,Red on White 1,Red on White 2

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

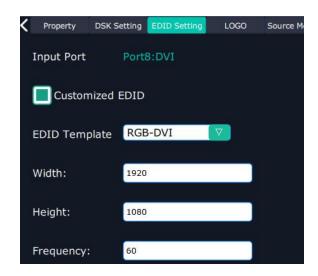
Input Port: Current Port and type

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

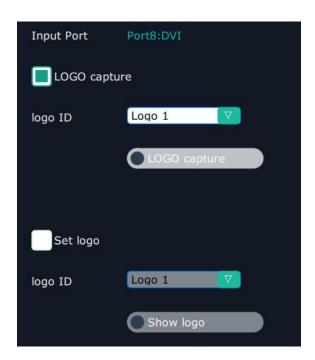
Logo Catpure

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

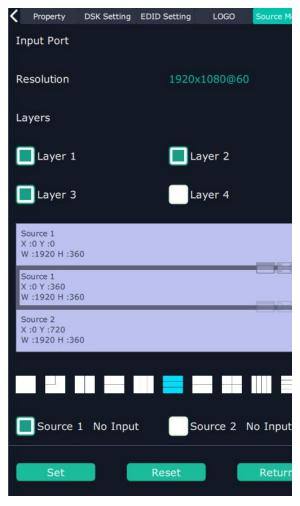




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2.1.5 Source Merge

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.



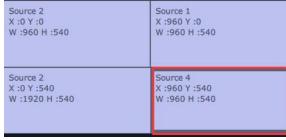
Resolution: resolution of current input source

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

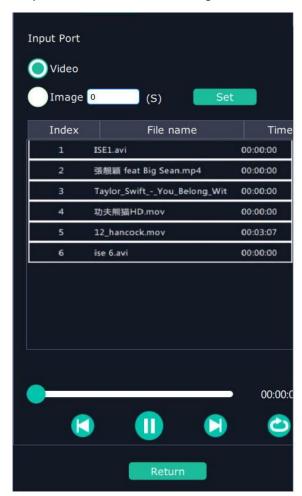
Select Video or Image

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



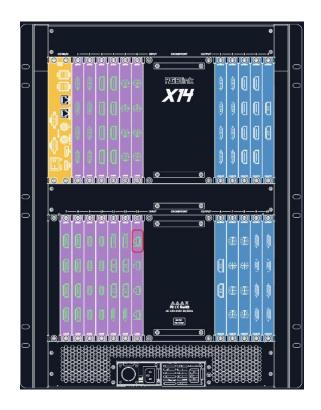
Choose Image, will list down the media files in graphic format by index. Set playing time from 0 to 255S.

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



2.5 Select H.264 input port as the picture





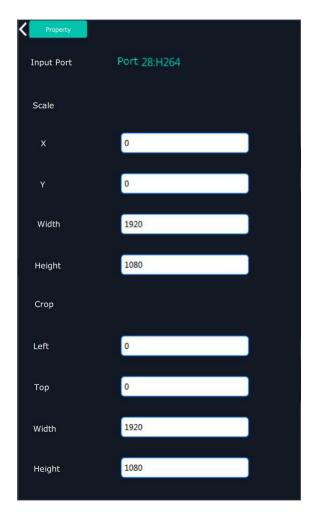
Property could be set:

Input Port: Current port and type

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

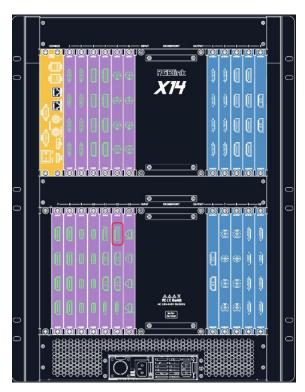
Crop: set starting position (X,Y) ,and size (Width, Height)





2.6 Select any port on 4K@60 board.



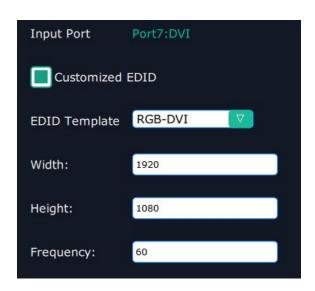


There comes Property,4K Setting ,EDID Setting

$2.6.1\,\textbf{EDID Setting}$

Input Port Current Port and Type
Customized EDID

EDID Template: RGB-DVI or RGB-HDMI Width, Height, Frequency:current

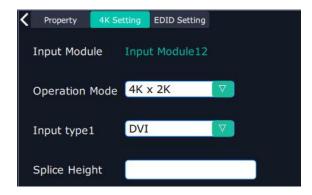




2.6.2 Property



2.6.3 **4K Setting**



Input Module: current module position

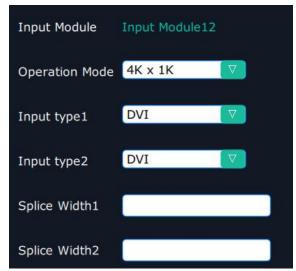
Operation mode:4K x 2K, 4K x 1k, 2K x 1K, PIP

4K x 2K

Input type 1: select from DVI, HDMI and DP

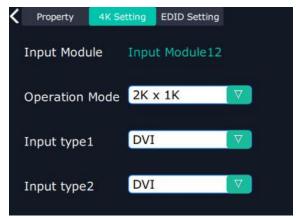
Splice Height: no more than 2160

4K x 1K

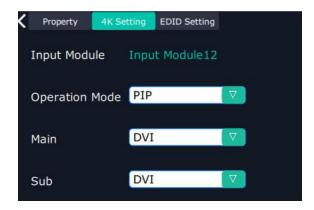




Input type 1 & Input type 2: select from DVI, HMDI and DP Splice Width 1& Splice Width 2: no more than 10000 2K x 1K



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 addres or manually type in the IP address, MASK and Gateway



Factory setting: Remove Logo and/or Remove EDID

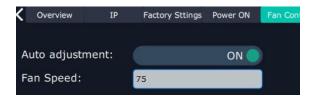


Power on: 0-255S





Fan Control: Auto adjustment, Fan speed 0-99

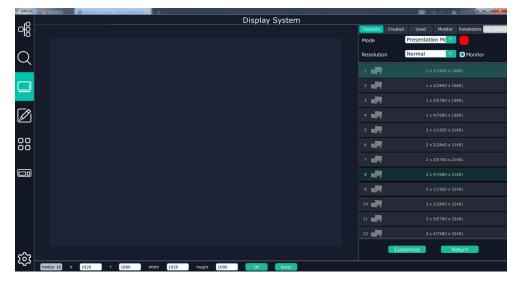




Display System

Display System is for users to set layout of outputs.

Click this icon first and then click enter the interface as follow:



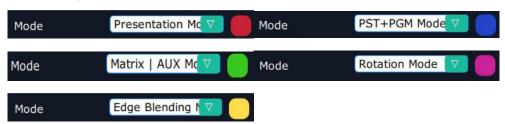
Template:

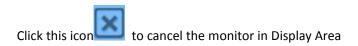
There are 16 types of basic "Display Area" which is used to contain output interface, and could be regarded as layout of output.

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.









Long pressing this icon to cancel the Display Area

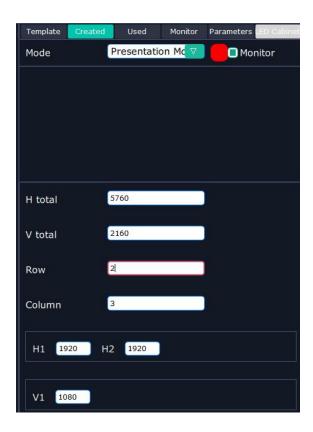


Use the bar under the interface and type in the parameter to set resolution and position of monitor



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" 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.





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.



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

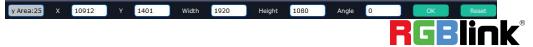


But under Rotation and Edge Blending mode, they are different.

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.



Parameter under Edge Blending Mode



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.



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.





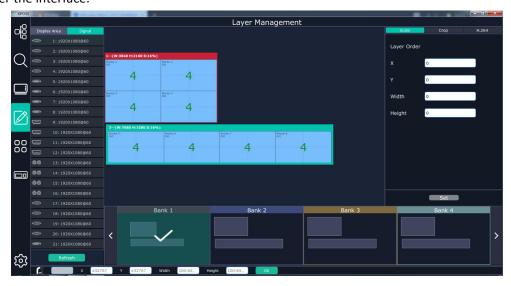
Layer Management



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 cancel or use the corresponding Display Area.





Signal

Signal _____

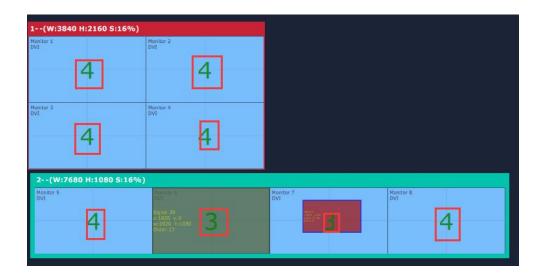
To show the signal list of 52 inputs. Drag source from signal list to monitor

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

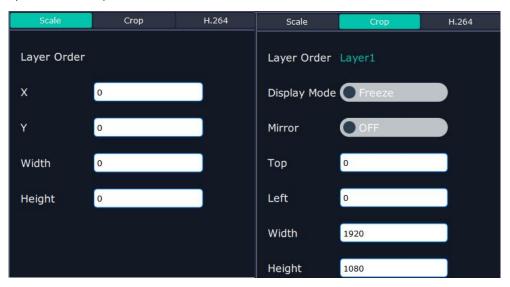
Under the Presentation Mode, there are two ways to adjust layer.

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

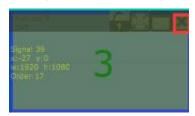
Place the cursor on the layer, it turns to a palm icon , press the left of mouse, the icon turns

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.



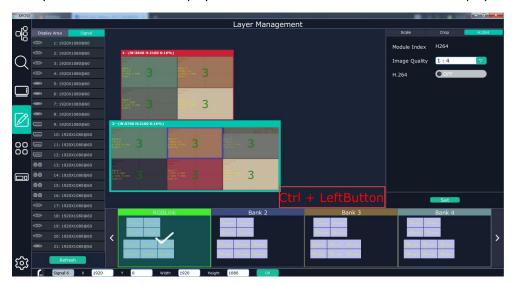
Layer Max

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

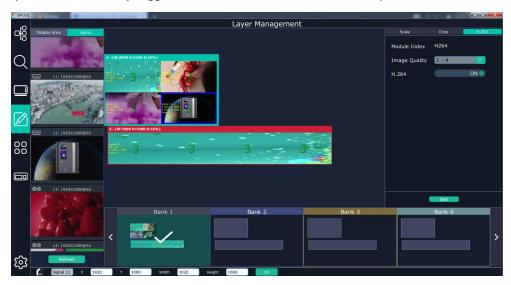
H.264

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 enouh, 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.



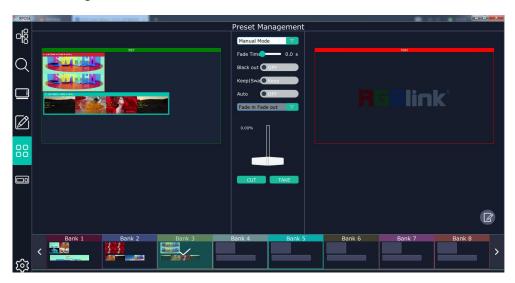


Preset Management



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.

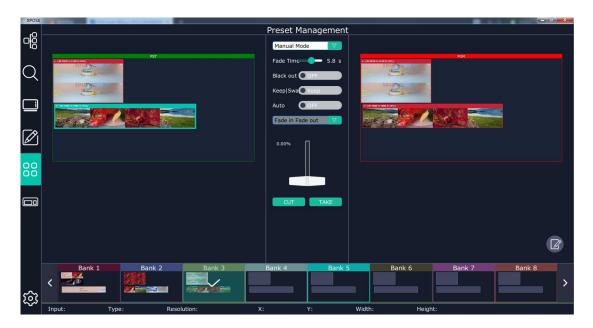


Click Cut or TAKE to switch the content on PST to PGM.

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.

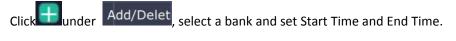


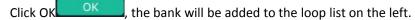
Schedule Mode

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

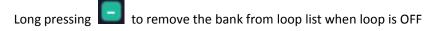


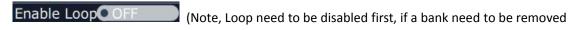
Loop











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

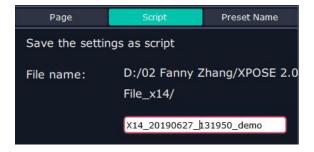
Click Load Page, pages with bank saved are green, select one from them and the selected one becomes red. The bank is loaded from page to PST.



Script Save and Load

Save Script





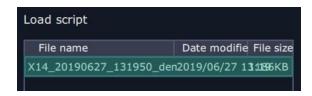
Load and Delete Script

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.





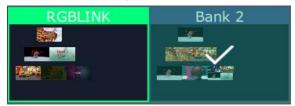
Preset Name

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.



For exmaple change Bank1to RBGLINK, with green boader

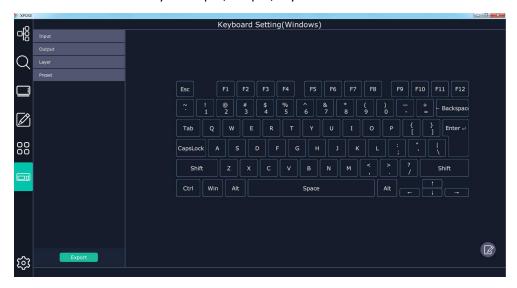




Keyboard Setting

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:

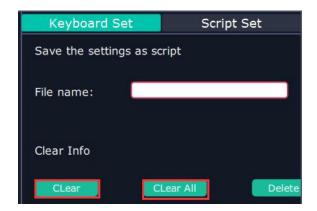


If the setting goes wrong or no need for short cut keys any more, click to clear some keys or clear all.

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

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

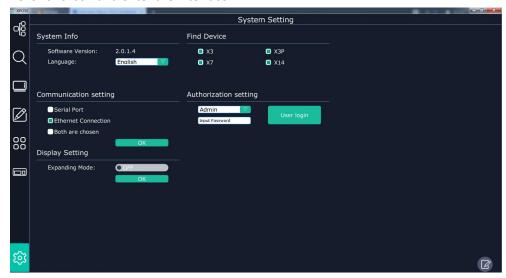






System Setting

Click this icon and enter the interface



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

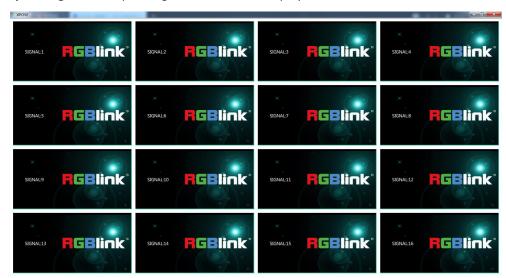
Communication Setting, this is to decide how XPOSE to communicate with the device

By serial port, ethernet connection, or both are choosen

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 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 ${\bf ON}$

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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