

X^{8K}
VENUS
LEGENDARY



Quick Start

- 4K ready with quad link HDMI 2.0 input
- HDR 10 & HLG compliant
- Up to eight 4K/UHD layers per port
- Fully customisable in/out resolutions & EDID Management
- OSD overlay features
- XPOSE 2.0 Web Server Built in with IP connection
- Genlock/Sync
- I/O Module Based Design and hot swap capacity
- Each input module support up to 4*4K2K@60
- Each output module support up to 2*4K2K@60

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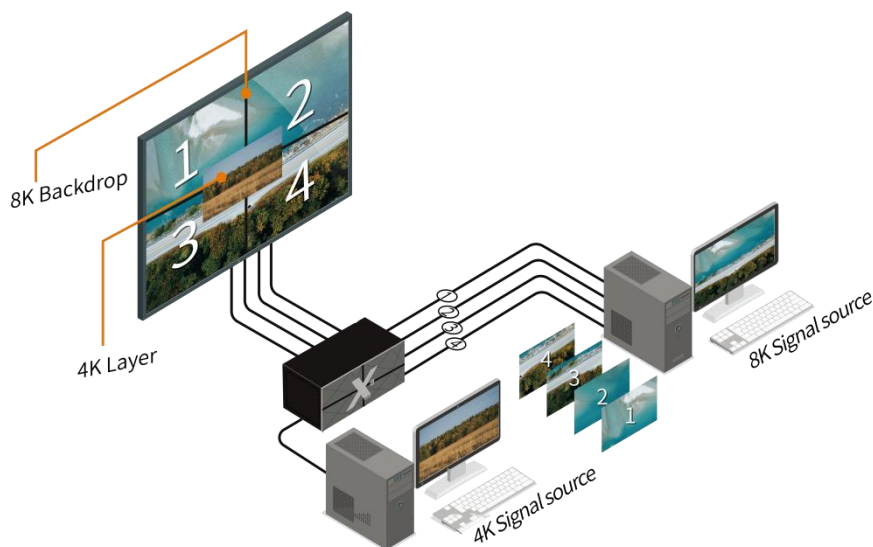
Overview

X8 as a new member of X series maintains leading technology. Since 2015, X series provide excellent solutions for national conference, stage activities and other high-end applications. With the higher requirements of resolution and layers, X8 upgrades and supports 4K/8K processing.

X8 is an HDCP compliant, scalable and extendable routing and video wall processor configurable to support a variety of inputs and outputs. It features RGBlink 3rd generation high performance video scaling technology for excellent image reproduction. The most outstanding feature of it is its thoroughly modular design, the card frame style, SmartSlot system allowing installation of up to 24 inputs and 12 outputs. Any input can be scaled, positioned, routed, transcoded to any output or be assembled as layers across outputs. Built for intensive switching and routing applications, the modular design extends to all aspects of the X8 for reliable and durable service.

System Connection

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



SYSTEM CONNECTION DIAGRAM

Packing Configuration

AC Power Cord



Network Cable



HDMI Cable

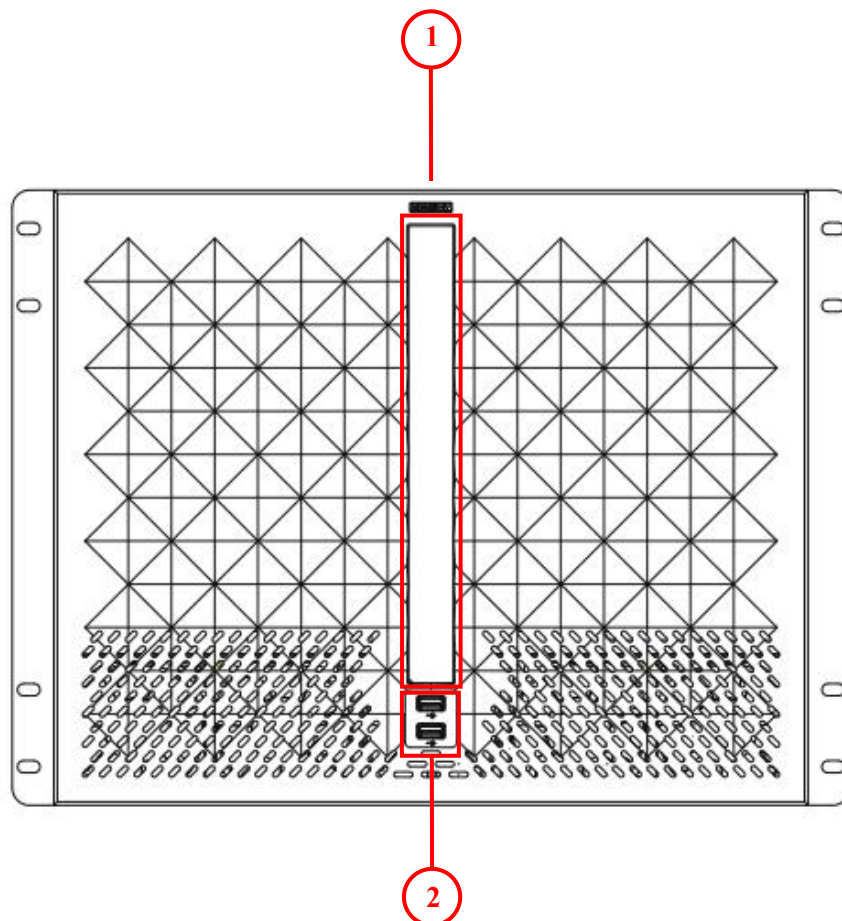


Note:

AC Power Cable supplied as standard according to destination market.

Hardware Orientation

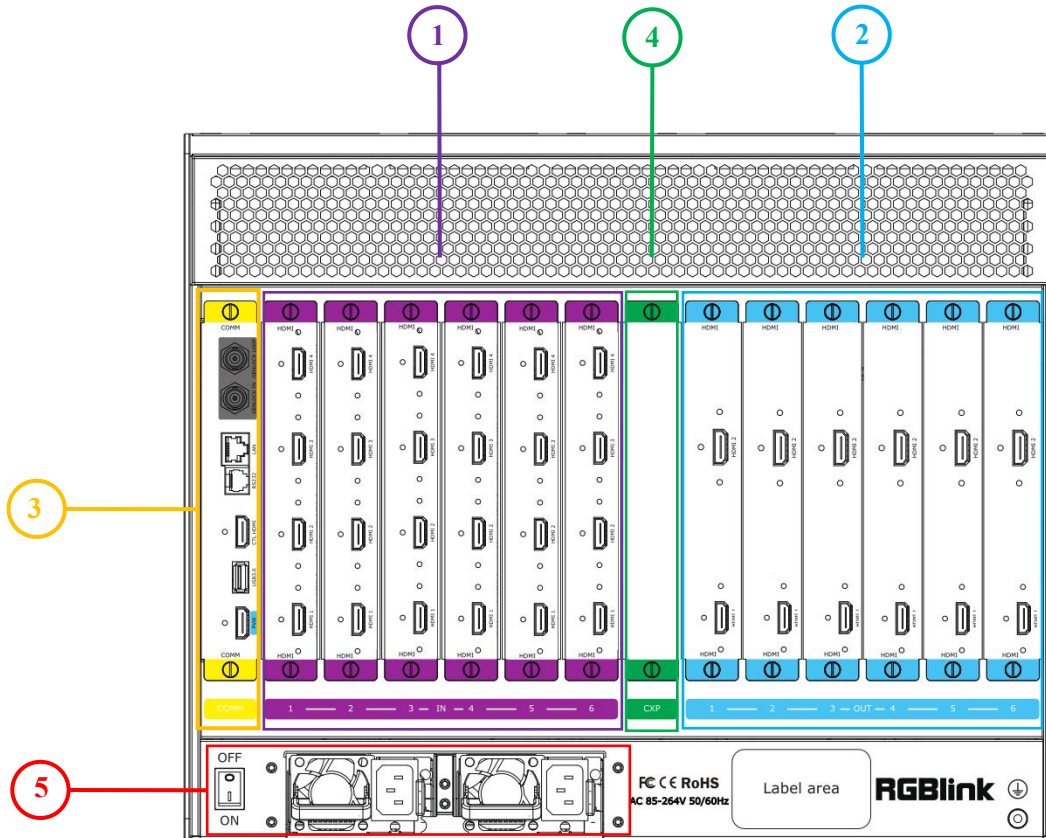
Front Panel



Front Panel Structure

1	TFT-LCD panel,show the info of input and output module,device status,weather and so on
2	1×USB 2.0 ; 1×USB 3.0(blue), for upgrade

Rear Panel



Chassis Module Structure

1	6 input module slots up to 24 inputs totally, for Quad 4K HDMI Input Module, Quad DP 1.2 Input Module, Quad 12G SDI Input Module, Single HDMI 2.1&DP 1.4 Output Module
2	6 output module slots up to 12 outputs totally, for Dual 4K HDMI Output Module, Dual DP 1.2 Output Module.
3	Communication ports including Genlock, LAN, RS232, CTL, USB 3.0 and HDMI
4	CXP ports (to be developed)
5	2 slots for power supply modules and Power Switch



HDMI 2.1& DP 1.4 Input Module Leadtime: 2022/6/1

DP 1.2 Input Module Leadtime: 2022/6/15

DP 1.2 Output Module Leadtime: 2022/7/1

Install Your Product

Plug in Signals

Connect signals to the product (ensure all the device are all power off first).Tighten connector screws/locks where provided.



Please use cable that can support HDMI 2.0 to ensure 4K@60Hz input and output when 4K signal is used.

Connect RS232 port of device and computer with serial cable or connect LAN port of device and computer with network cable or connect both device and computer to the same router, make sure their IP address is not completely same.

Plug in Main Power

Connect IEC cable to device and plug into wall socket. Turn on power at wall socket.



If the devices is restarted, make sure the indicator light upon the PSU module is totally out before plugging in the power.

Turn on Your Product

Turn on the power switch on the rear panel.

The system begins to work,and the TFT-LCD screen shows the input slot and output slot information, device status, COM. Versions. IP address and serial number.

Use Your Product

Install XPOSE 2.0

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

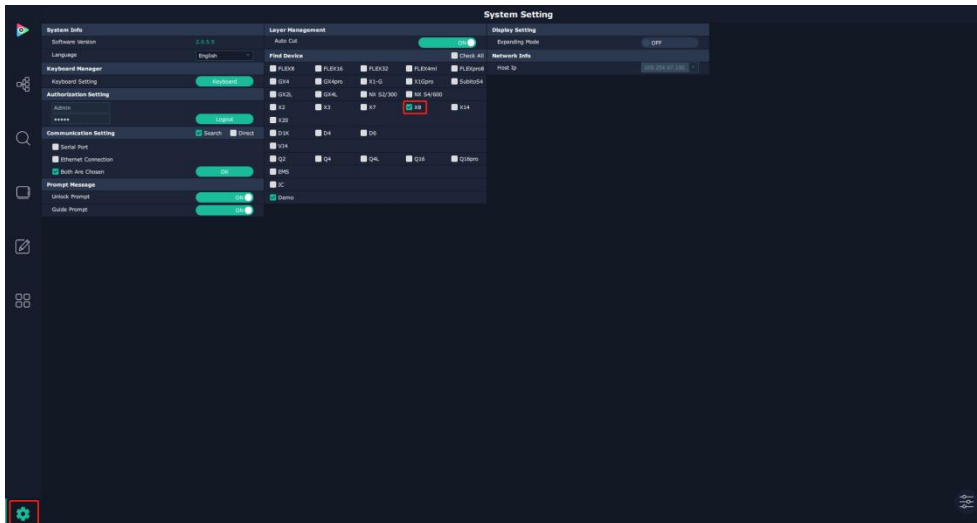
Monitor: Resolution must be 1680x1050 pixel or above (it can not display normally if the resolution is lower than 1680x1050)


CPU:i5 and above

XPOSE Controls X8

Connect the Device

Click the icon  to open **【System Setting】**, and select **X8** in **【Find Devices】**.




Click the icon  and click refresh  to check all available devices in the network. Click  to

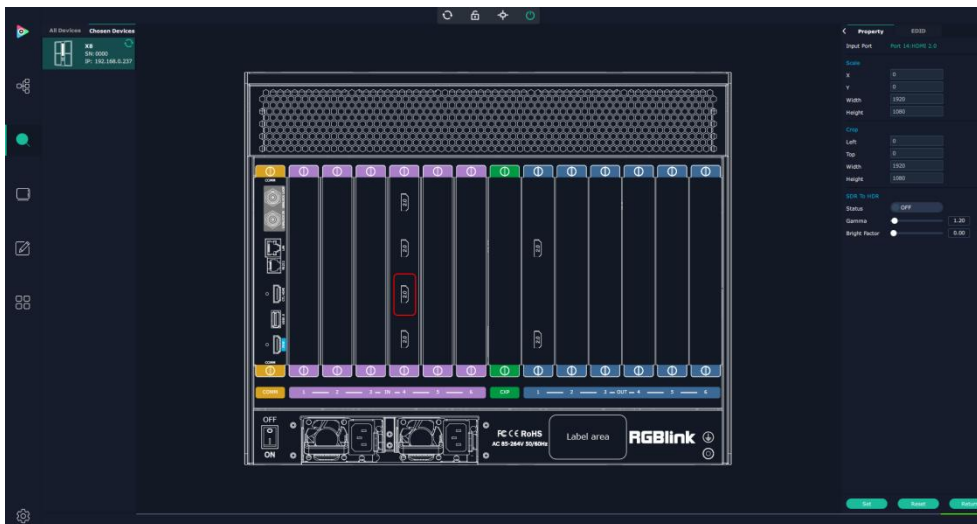
choose X8 and click  to obtain the control of this device in **【Chosen Devices】**, as shown in the picture below.



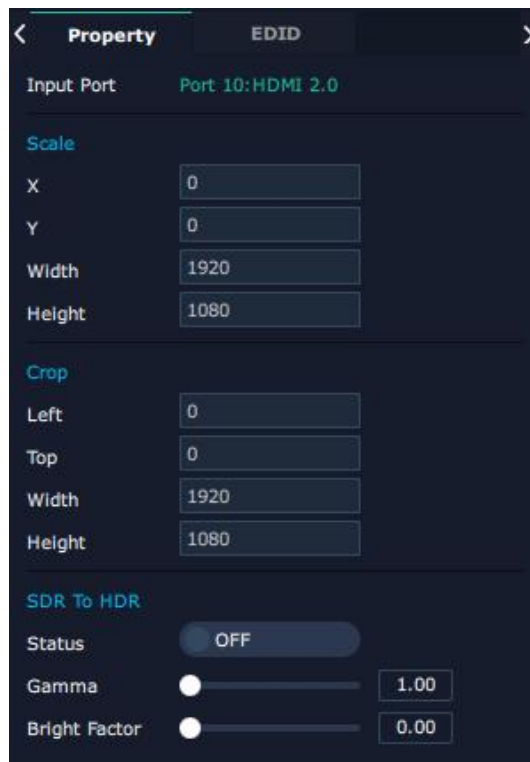
💡 purple  tip indicates input modules, blue  output modules, yellow  communication port.

Input Setting

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.



Property Setting



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

SDR to HDR

Status: ON/OFF

Gamma:0~9.99(Adjust the brightness of picture,the higher the number,the higher the brightness)

Bright Factor: 0~9.99


EDID Setting



Input Port: Current Port and type

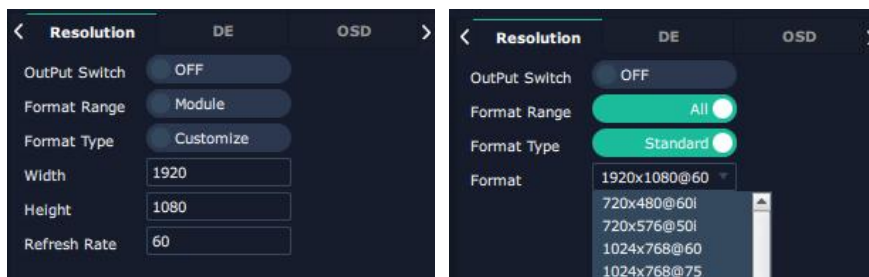
Customized EDID: Monitor Name, Width ,Height and Frequency

Output Setting

Click any output port, the module where the port locates is selected. Users can do settings to the modules now. A red rectangle  flashes around the port when it is chosen.



Resolution Setting



Output Switch: Slide to On or OFF

Format Range: select ALL or Module. All means this setting is applied to all output ports, Module means this setting is only valid on this module.

Format Type: Standard /Customize

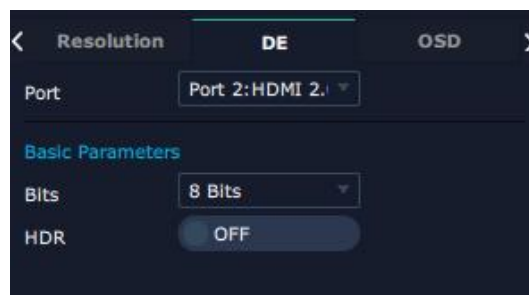
Choose Customize, width, Height, Refresh Rate have to be put in by users manually.

Format: when format type is Standard, there are standard format list to choose.

Format for ALL: 720×480@60i 到 7680×1080@60

Format for Module: 1024×768@60 到 7680×1080@60

DE Setting



Port: choose current port or Port All

Bits: 8bits/10bits/12bits

HDR: ON/OFF

OSD Setting

Resolution DE OSD

Operation Mo... Single Output

Output port Port 2: HDMI 2.0

Status OFF

Position

X 0

Y 0

Width 1920

Height 80

Font Style

Font Juice ITC

Type Normal

Size 80 Pixel

Alignment Left

Transparent

Color #FFFFFF

Background

Transparent

Color #000000

Scrolling

Speed 1

Direction Scroll Off

Input Text

Hello World

Save OSD Clear OSD Close All OSD

Output port: the current port

Status: ON or OFF

Position

X/Y:the starting horizontal and vertical position

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

Font Style


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

Transparent:font transparent

Color: Click  to select more font color

Background

Transparent: background transparent

Color: Click  to select more background color

Scrolling

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

Device Overview

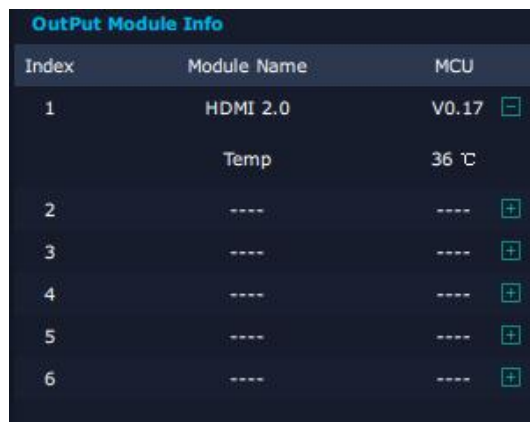
Click Return , there are overview, IP setting, Fan Control, Power ON, Factory Setting,

Overview: show Device Info, module info of version and temperature in each slot.



The screenshot shows the 'Overview' menu with three tabs: Overview, IP, and Fan Control. Under 'Device Info', it lists Version (0.26), Temp (39 °C), and MAC (46:70:C2:01:B6:EE). Under 'Input Module Info', there is a table with 6 rows. Row 4 is selected, showing 'HDMI 2.0' and 'V0.11' with a temperature of 34 °C. Other rows show '----' for module name and MCU, and '+' icons for expansion.

Index	Module Name	MCU
1	----	----
2	----	----
3	----	----
4	HDMI 2.0	V0.11
	Temp	34 °C
5	----	----
6	----	----



The screenshot shows the 'Output Module Info' section with a table of 6 rows. Row 1 is selected, showing 'HDMI 2.0' and 'V0.17' with a temperature of 36 °C. Other rows show '----' for module name and MCU, and '+' icons for expansion.

Index	Module Name	MCU
1	HDMI 2.0	V0.17
	Temp	36 °C
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

IP Setting

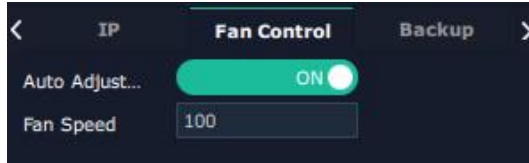
Select Auto IP address or manually type in the IP address, MASK and Gateway



Fan Control

Auto adjustment:ON/OFF

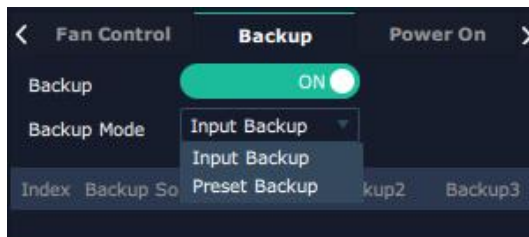
Fan speed: 0-100



Backup

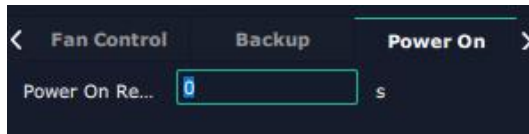
Backup:ON/OFF

Backup Mode: Input Backup/Preset Backup



Power On Reserve

Power On Reserve:0~255s



Factory Setting

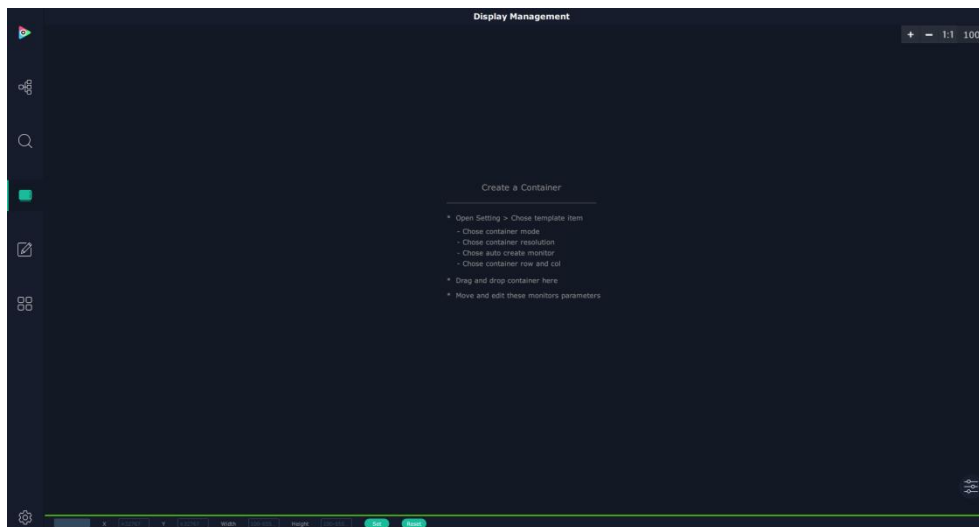
Remove Logo/EDID,Save IP



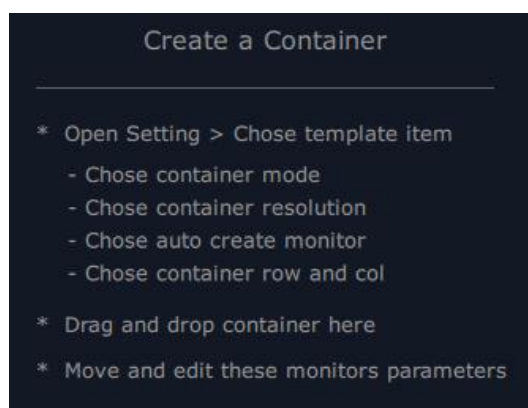
Display Management

Display System is for users to set layout of outputs.

Click this icon  first enter the interface as follow:



Container



Container here means the Display Area, for example it could be a formed LED screen or an array of LCDs

Template

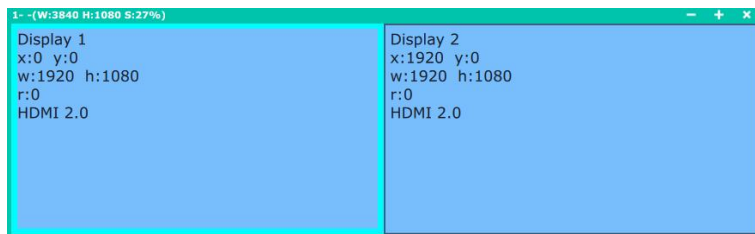
There are 15 types of basic "Display Area" which is used to contain output interface, and could be regarded as layout of output.


Mode

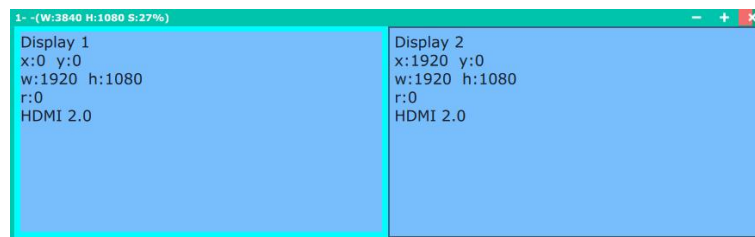
At present, X8 supports Presentation Mode, Other products of X series also support PST+PGM Mode, Rotation Mode and Edge Blending. Rotation and Edge blending is valid only when ARO rotation module is installed to the device. Each mode is marked in different color and provided with fitted templates.



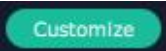
Container(dragged from Template) under Presentation Mode

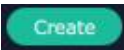



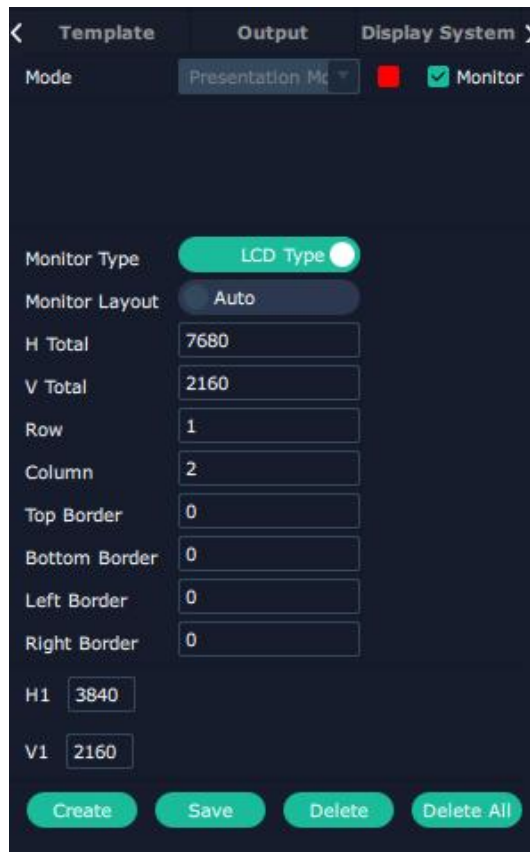
Delete Container:long press the  to cancel the Container/Display Area



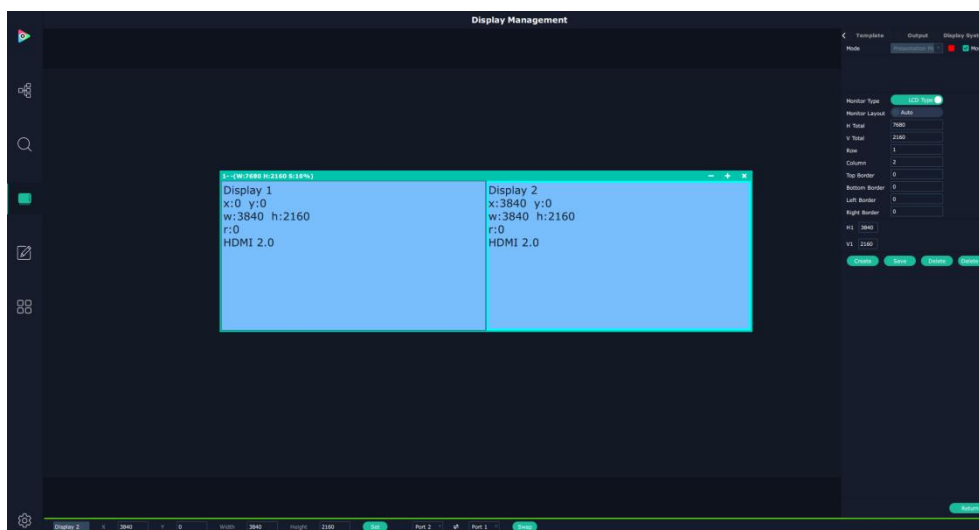
Customize Container

Click this icon  at the bottom of template list. fill in the H Total, V Total, Row and Column, then

click  a customized containers is created. If this container need to be saved, click SAVE 



For example create a , 1x2 ,7680x2160 container as follows

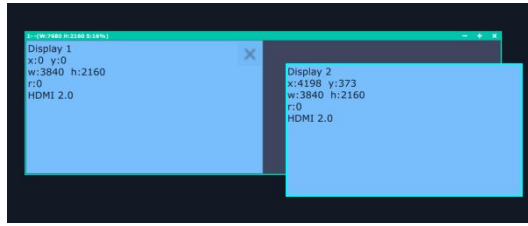


Adjust Display Area

Place the mouse in the Container, roll the mouse can zoom in or out the Container in the XPOSE window.

Clicking icon  and  can do the same work.


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

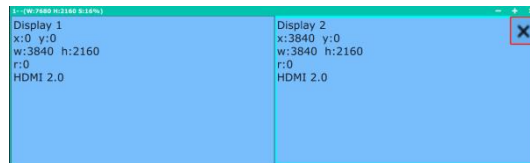


Output

Show all the output ports on the device. Once the monitor is dragged into container meaning this output is used and the output port get dark.

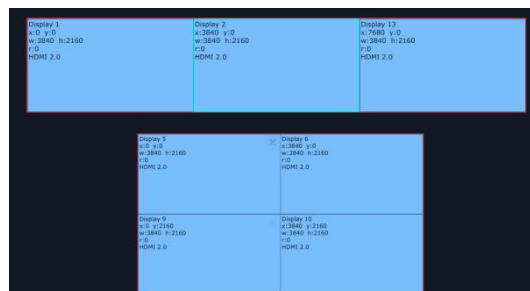
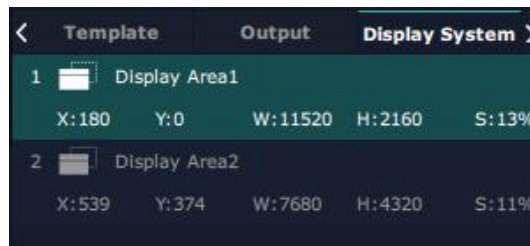


Click this icon  on Display to cancel the display in Display Area




Pressing CTRL+ALT can lead to close of all displays on the XPOSE window.

Display System



Show all Containers/Display Area that have been created.

Click tick icon  behind to give alias to the each Display Area if necessary.

	Template	Output	Display System		
1	Display Area1	<input checked="" type="checkbox"/>	X: 180	Y: 0	W: 11520 H: 2160 S: 13%
2	Display Area2	<input type="checkbox"/>	X: 539	Y: 374	W: 7680 H: 4320 S: 11%

Parameters

Parameter is designed to set size (Width, Height)and position (X,Y) of each display.

There are two ways to adjust the display, by Parameter or by the bar below the window.

Parameter

Display System		Parameters	Hotkey
Index			
Scale			
X		<input type="text" value="0"/>	
Y		<input type="text" value="0"/>	
Width		<input type="text" value="1920"/>	
Height		<input type="text" value="1080"/>	
Border			
Top Border		<input type="text" value="0"/>	
Bottom Border		<input type="text" value="0"/>	
Left Border		<input type="text" value="0"/>	
Right Border		<input type="text" value="0"/>	

Bar under XPOSE window


Display 2	X	<input type="text" value="3840"/>	Y	<input type="text" value="0"/>	Width	<input type="text" value="3840"/>	Height	<input type="text" value="2160"/>	<input type="button" value="Set"/>	Port 2	<input type="button" value="↔"/>	Port 1	<input type="button" value="Swap"/>
-----------	---	-----------------------------------	---	--------------------------------	-------	-----------------------------------	--------	-----------------------------------	------------------------------------	--------	----------------------------------	--------	-------------------------------------

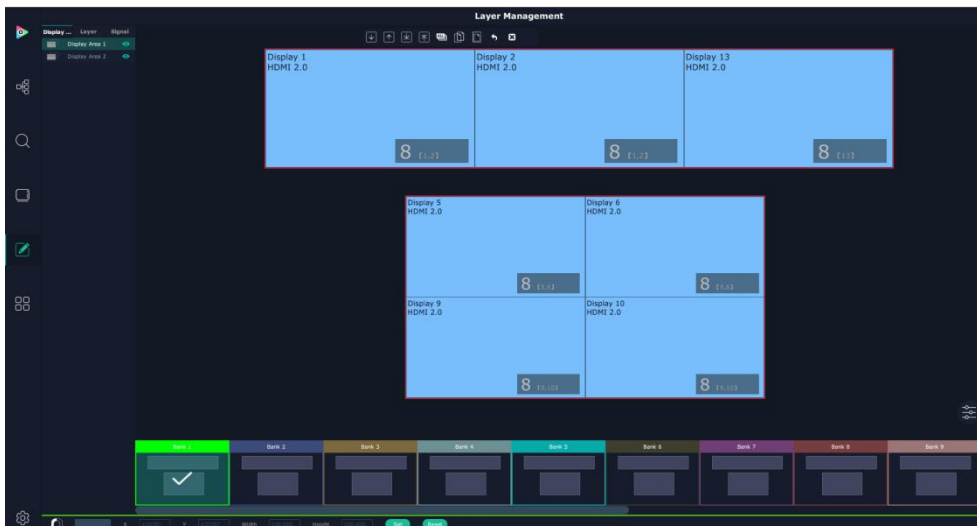
Swap : Swap two output ports if needed.

Hotkey


Display System	Parameters	Hotkey
Description	Windows	
Default Scale	Space	
Monitor Zoom In	+	
Monitor Zoom Out	-	
Monitor Up	↑	
Monitor Down	↓	
Monitor Left	←	
Monitor Right	→	
Monitor Select Next	Tab	
Monitor Delete	Delete	
Continer Zoom In	Ctrl + +	
Continer Zoom Out	Ctrl + -	
Continer Up	Ctrl + ↑	
Continer Down	Ctrl + ↓	
Continer Left	Ctrl + ←	
Continer Right	Ctrl + →	
Continer Select All	Ctrl + A	
Continer Select One	Ctrl + Mouse Click	
Continer Select Next	Ctrl + Tab	
Continer Delete	Ctrl + Delete	

Layer Management

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



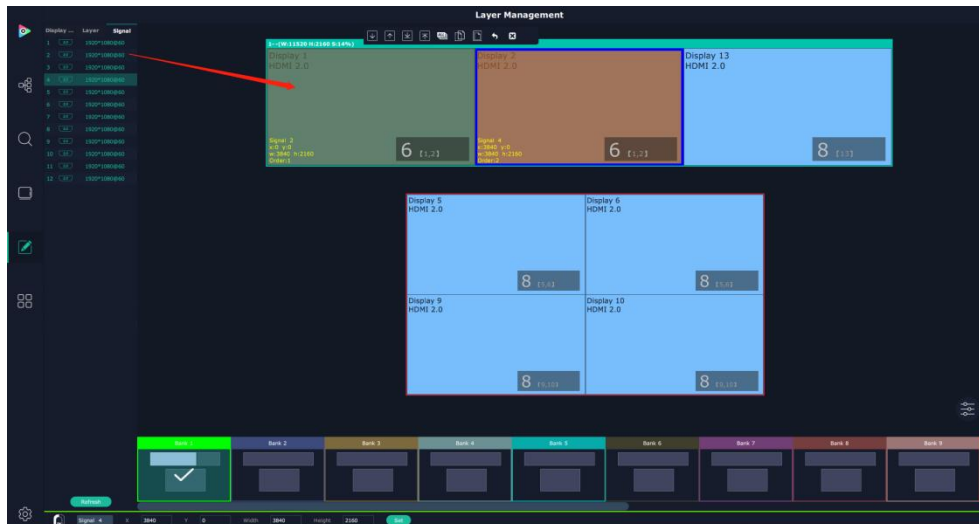
Display Area

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

Display ...	Layer	Signal
	Display Area 1	
	Display Area 2	

Signal

To show the signal list of all inputs. Drag source from signal list to each display or Container.



Click this icon and alias of signal could be put in if necessary.

Display ...	Layer	Signal
1	2.0	1

Click this icon to confirm the alias setting.

Layer

After signal is dragged into display, show Layer index Versus Signal index

Display ...	Layer	Signal
	1 Order 1	Signal 2
	2 Order 2	Signal 4

Numbers on Monitor

Numbers on monitor is to show how many layers at present allowed to put in the monitor .

(each neighboring monitor (5 and 6, 9 and 10) allows to put 8 layers, if there is no neighboring monitor in the display area, the single monitor can contain 8 layers. For example in one display area, there are monitor 5 and monitor 6, monitor 5 can contain 8 layer and so does monitor 6)



Cross over display will take up one more layer, as shown in the picture below



Layer Adjustment

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.

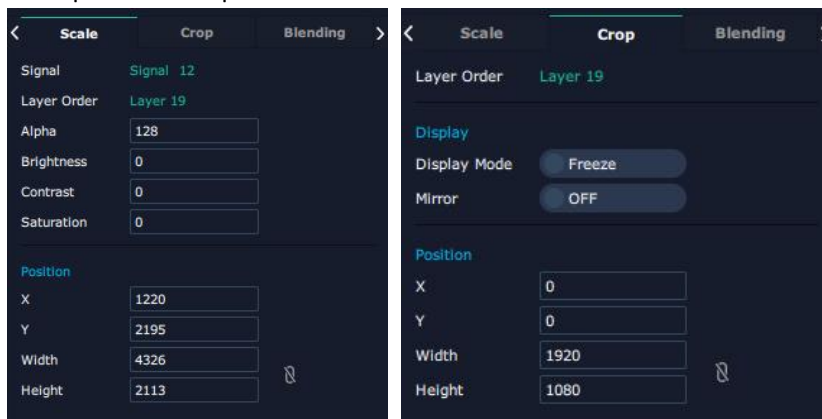


2. Layer Scale and Crop



Alpha: 0~128

Brightness/Contrast/Saturation: 0~100


Freeze: Turn ON freeze to prevent misoperation

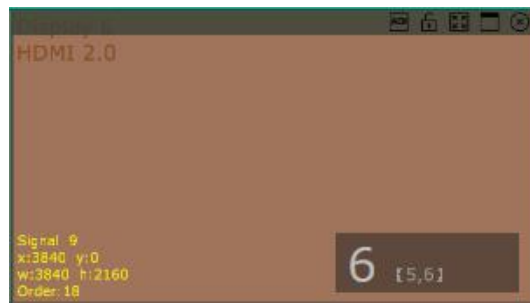


Layer Movement


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.



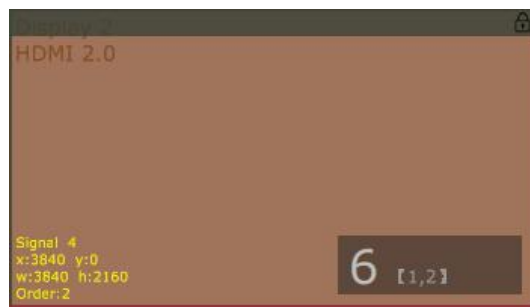
Layer Max

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



Layer 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.



Other Operation on Layer



Use the tools bar on top of window to do such operations

	Layer Backward		Layer Forward		Layer to Bottom
	Layer to Top		Select All		Copy Selected
	Paste Selected		Cancel Selected		Delete Selected

Save to Bank Automatically

When layer setting of one BANK is done, click next or other BANK, this BANK can be saved automatically.



Blending

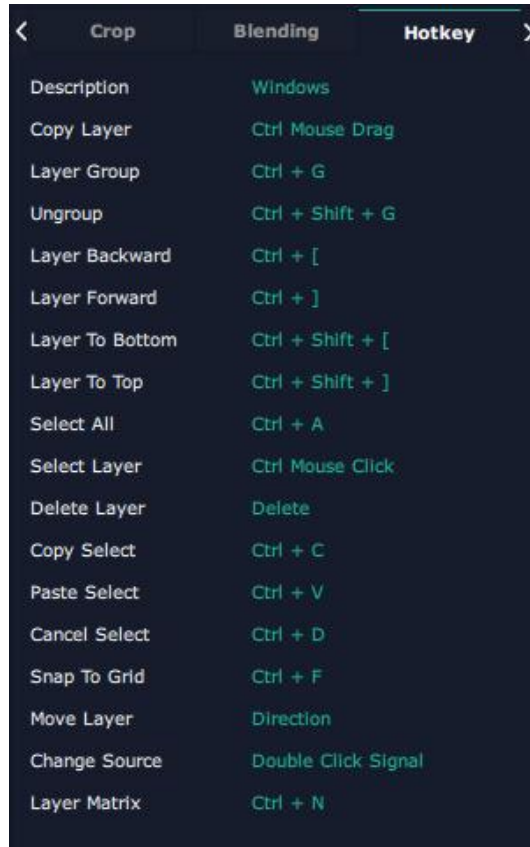
Width:the width of blending

Turn ON blending



HotKeys

Hot keys, provided to do quick layer setting such as Copy Layer, Layer move



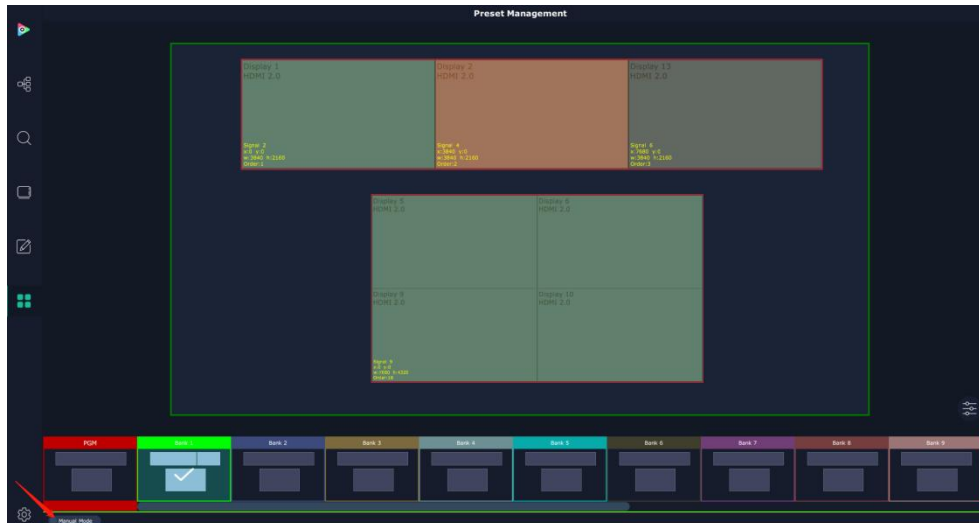
Preset Management



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

Preset Management Mode: 1. Manual Mode; 2. Schedule Mode

Manual Mode



Switch Manual Mode or Schedule Module by the bar in the left bottom corner of the window. Preset is showing the BANK selected. PGM is in first box in the bottom left.

Take Setting

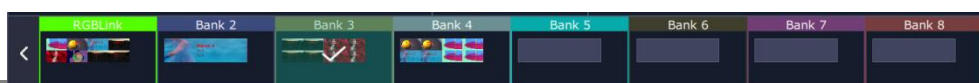


Click this icon  after selecting a BANK.

Fade Time: 0.0 ~10.0S

Black out: slide to ON or OFF

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



Keep|Swap

Only when separate **Display** switching is OFF can **Keep|Swap** work.

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.

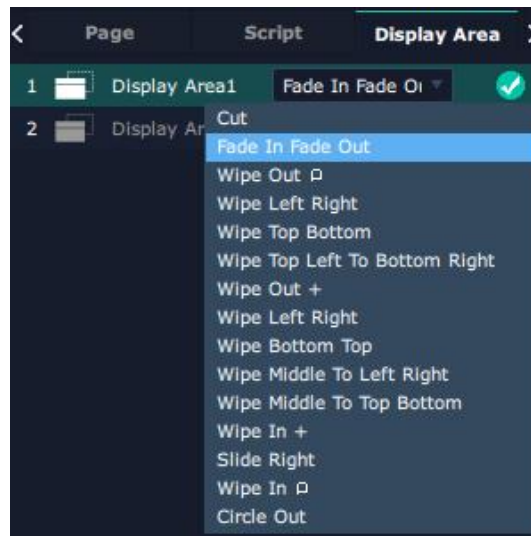
Cut|Take

Cut, switch from PST to PGM without any effect.

Take, switch from PST to PGM with chosen effect in set Fade Time.

Display Area

Display Area is to let users to choose which display areas to display on the PGM and allow users to set transition effect for each display area so that they can switch from PST to PGM in desired effect.

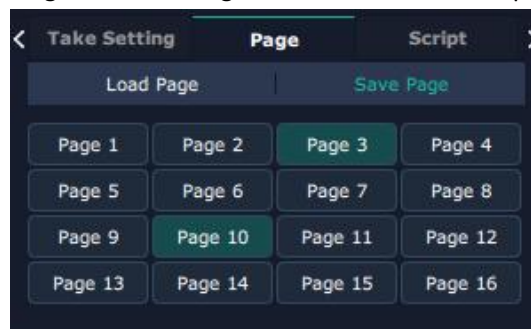


Bank Save and Load

Save Bank to Page

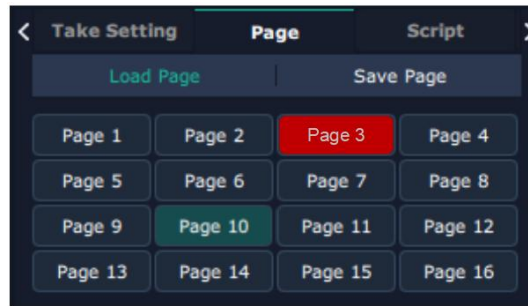
Select a bank,click Page,select Page X,the bank is saved in the page.

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



Load bank from Page

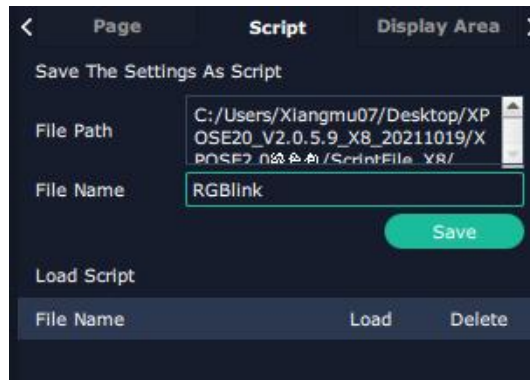
Click Load Page, pages with bank saved are green, select one from them and the selected one becomes red. The bank is loaded from page to PST.



Script Save and Load

Save Script

Fill in the blank with the name of setting and click Save

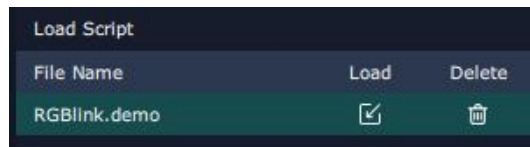


Load and Delete Script

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 Delete, 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.

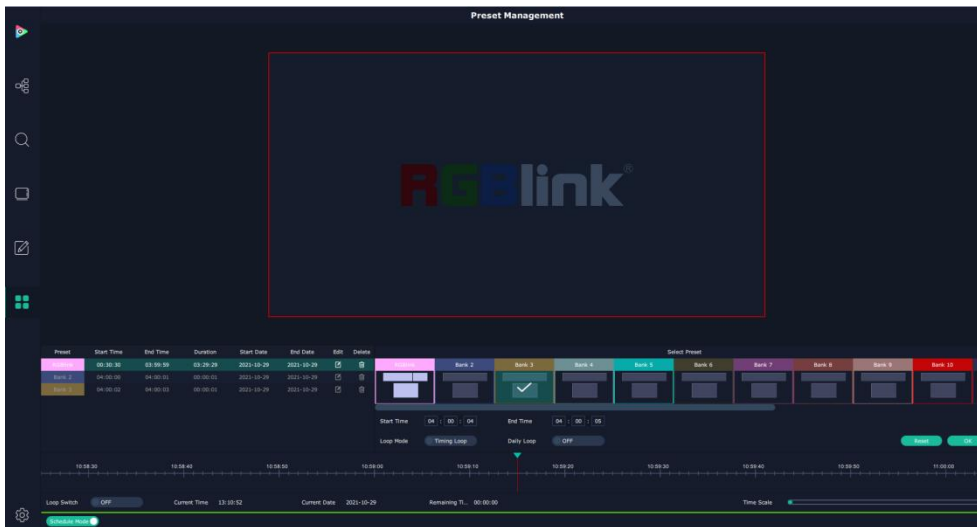


For example change Bank1to RGBlink, with pink boarder



Schedule Mode

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



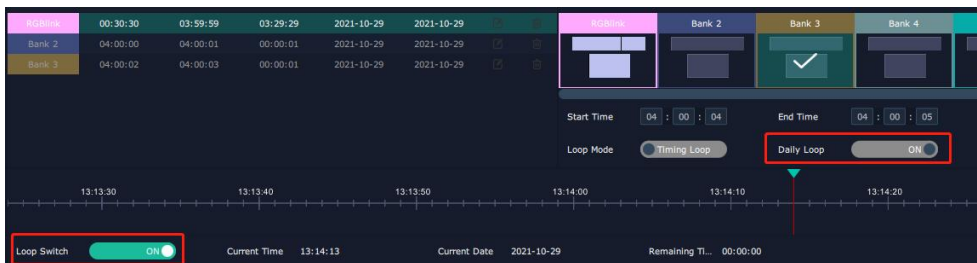
1. Select the bank that need to be looped.

2. Set **Start Time** and **End Time** and click **OK** to confirm.

The Preset can be added into the loop list after confirm. click this icon to edit Start Time and End Time if

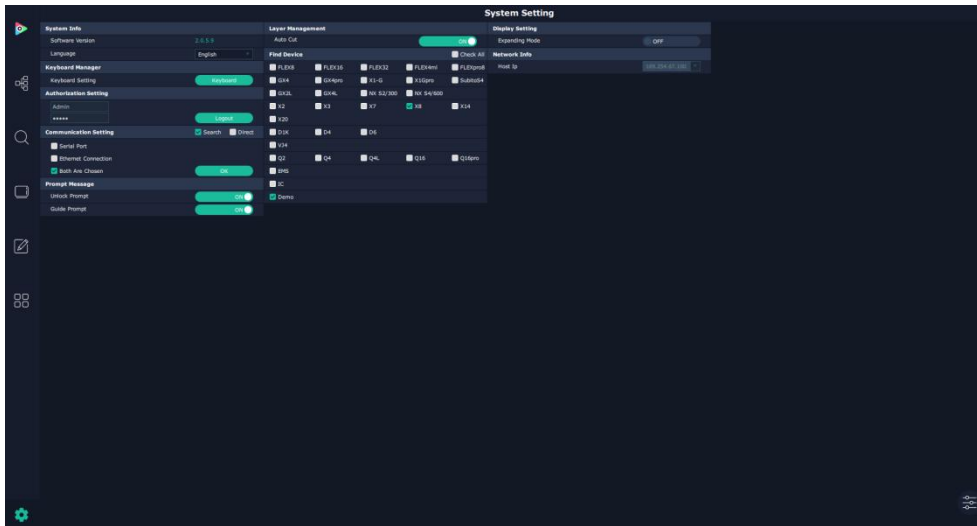
needed. Click this icon to delete this preset if it is not needed.

3. Turn on **Daily Loop** and **Loop Switch** .



System Setting

Click this icon and enter System Setting interface



System Info

Software Version: show the current software version

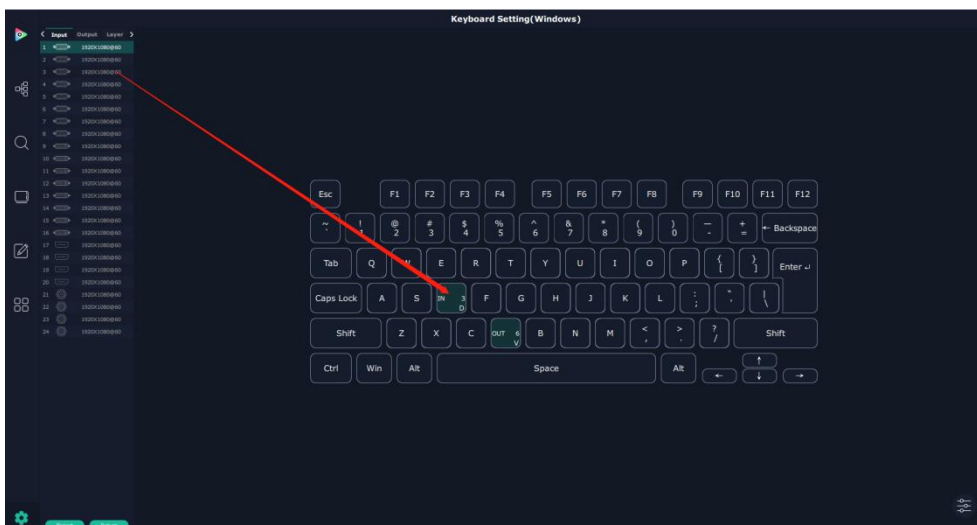
Language: Chinese, English and Russian

Keyboard Manager

click keyboard Keyboard it will redirected to keyboard setting window.


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:



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

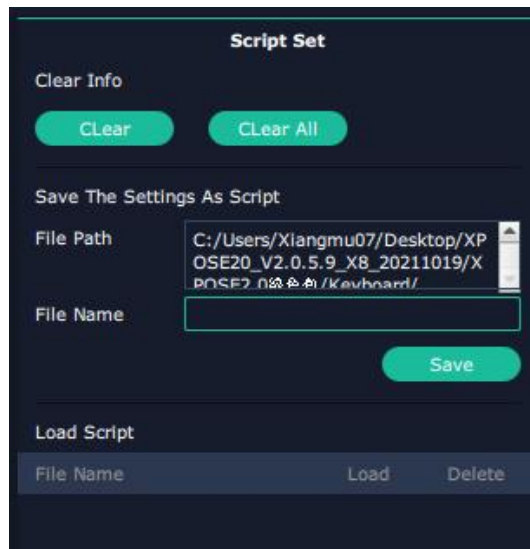


If the setting goes wrong or no need for short cut keys any more, click  to clear some keys or clear all.

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

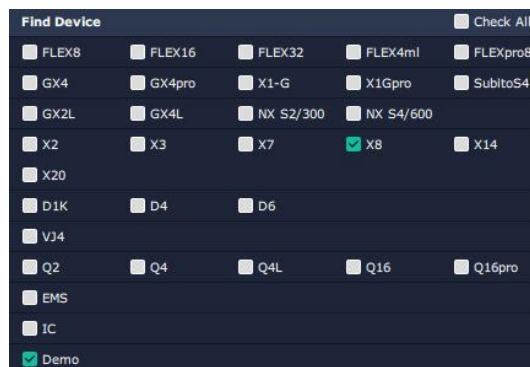
Clear all: is to remove all already set short cut keys.

After setting the shortcut keys, you can modify the default file name and save the script. The script will be automatically saved to the corresponding path in the XPOSE folder. You can load in script Settings when used again.



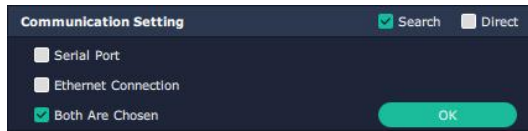
Find Device

New version of XPOSE 2.0 is blank default in Find Device. Users are supposed to choose the device needed in System Setting.



Communication Setting


Search by Serial Port, Ethernet Connection or Both. Default communication by both.

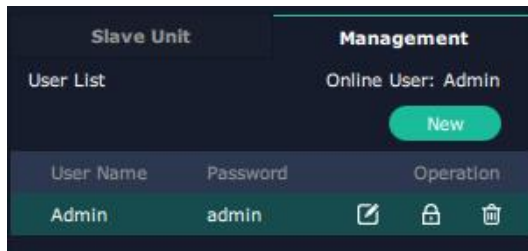


Direct Communication by selecting device and putting its IP Address





Authorization Setting


Click  to open up the authorization entry. Click **Management**

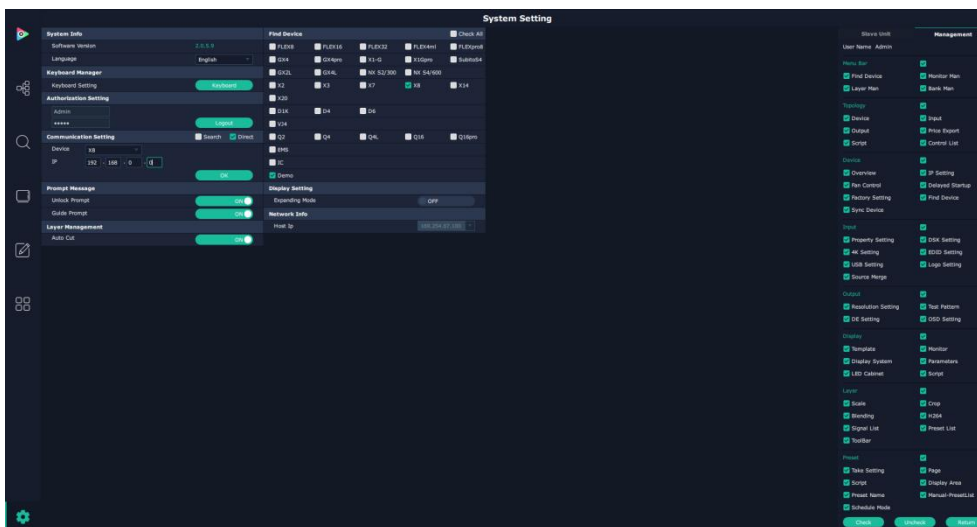


 New: Add new USER NAME and PASSWORD

 Edit: Edit user name and password already built.

 Delete: Delete user name and password already built.

 Permission: functions on this XPOSE 2.0 on this computer that the created users are allowed to operate.



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 is another devices linked to the same network, one with IP IP192.168.0.45

If users need to back up operation from current running device to this device 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.

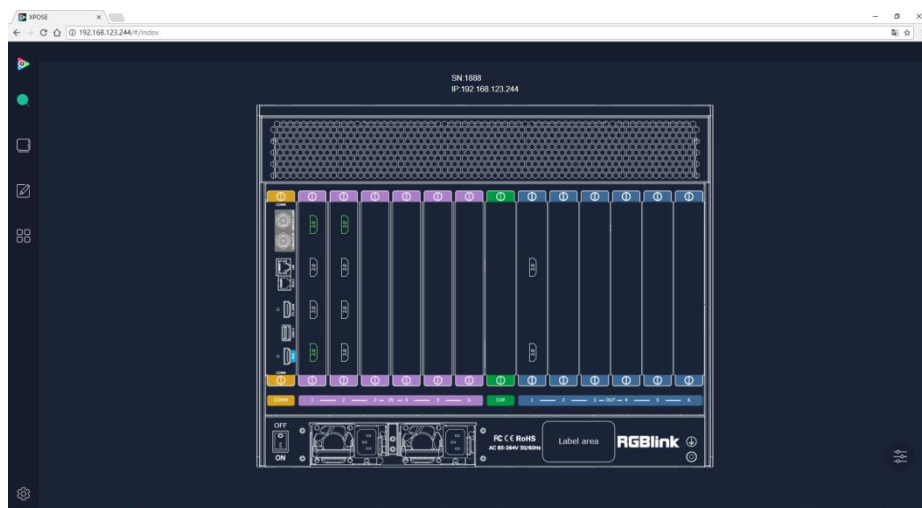
Choose the IP address of the other device from drop down list, e.g IP192.168.0.45 and Slide to ON, the red dot behind turns to green indicating that the device has been connected



Web Server Control X8

X8 supports Web control,operate as following steps:

- 1.Make sure your computer and the device are in the same network segment.
- 2.Type the IP address of the device in the web,and then login in,the interface of web control are the same as XPOSE software.Please refer to <3.2 XPOSE Control X8>.



Contact Information

Warranty:

All video products are designed and tested to the highest quality standard and backed by full 1 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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