RGBlink® Video {processing} for any scale

Q16

Quick Start



- Single port support up to 24 layers
- Each layer support for scaling, moving, crossing and overlying
- Support for 16 In 16 Out
- Up to 16 IP inputs via H.265 decoding , resolution up to 1080P
- Preview inputs
- Realtime streaming back
- Background picture import
- OSD

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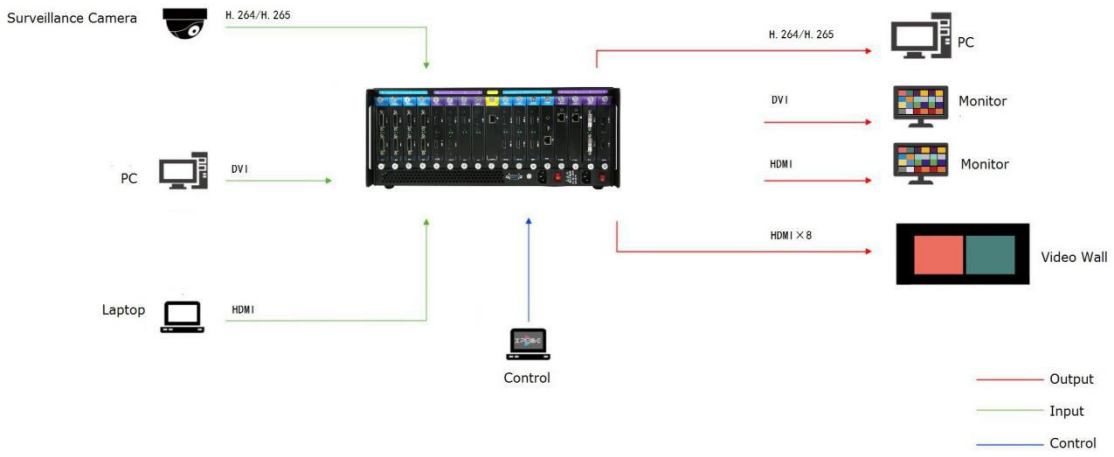
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Overview

Q16 adopt modular design, supporting 24 layers on each output.Each layer support for scaling, moving, crossing and overlying. It support for 16 In 16 Out. Up to 128 IP inputs via H.265 decoding , resolution up to 1080P. It also support preview inputs, realtime streaming back, background picture import and OSD.

System Connection

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



Q16 SYSTEM CONNECTION DIAGRAM

Packing Configuration

AC Power Cord



DVI Cable



HDMI Cable



Network Cable



Anti-Static Bag

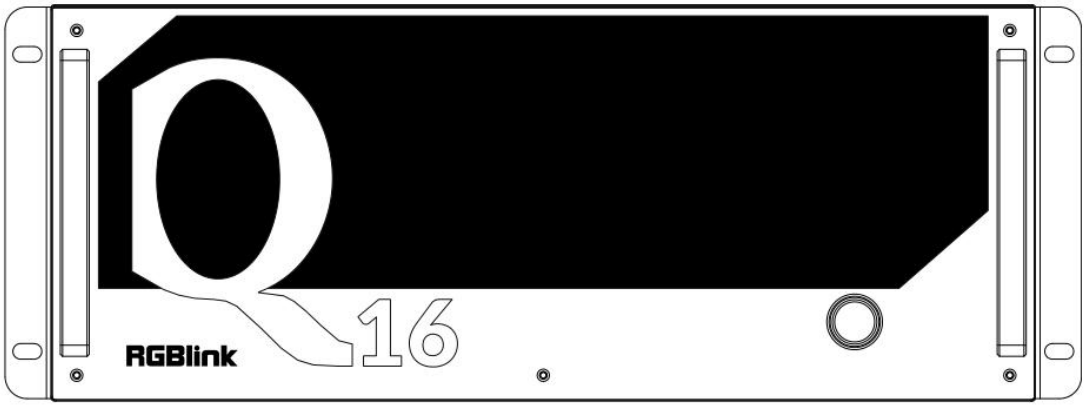
Note:

AC Power Cable supplied as standard according to destination market.

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Hardware Orientation

Front Panel

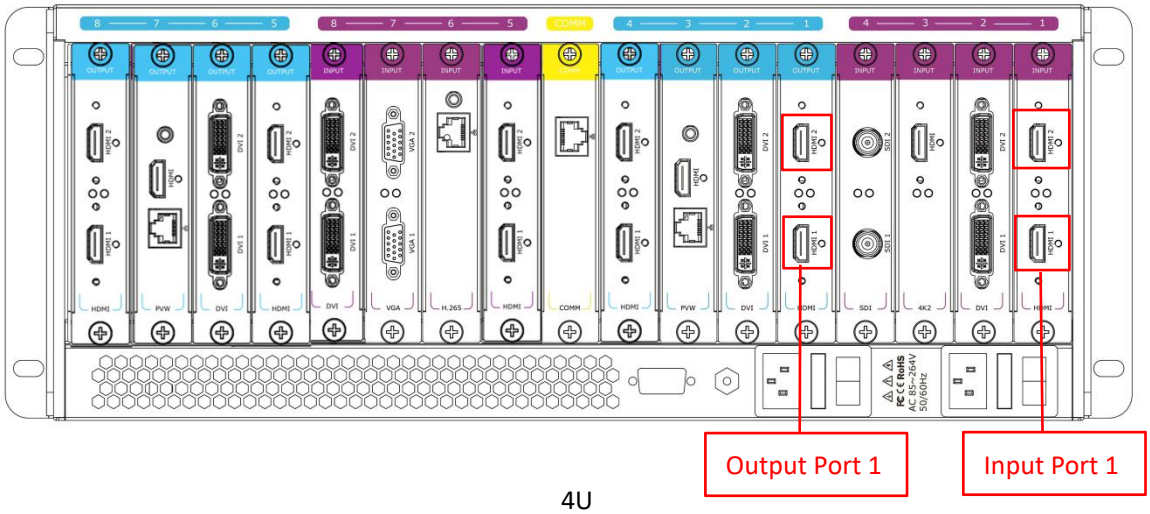


Button Instruction	
○	Power

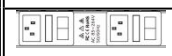
Rear Panel



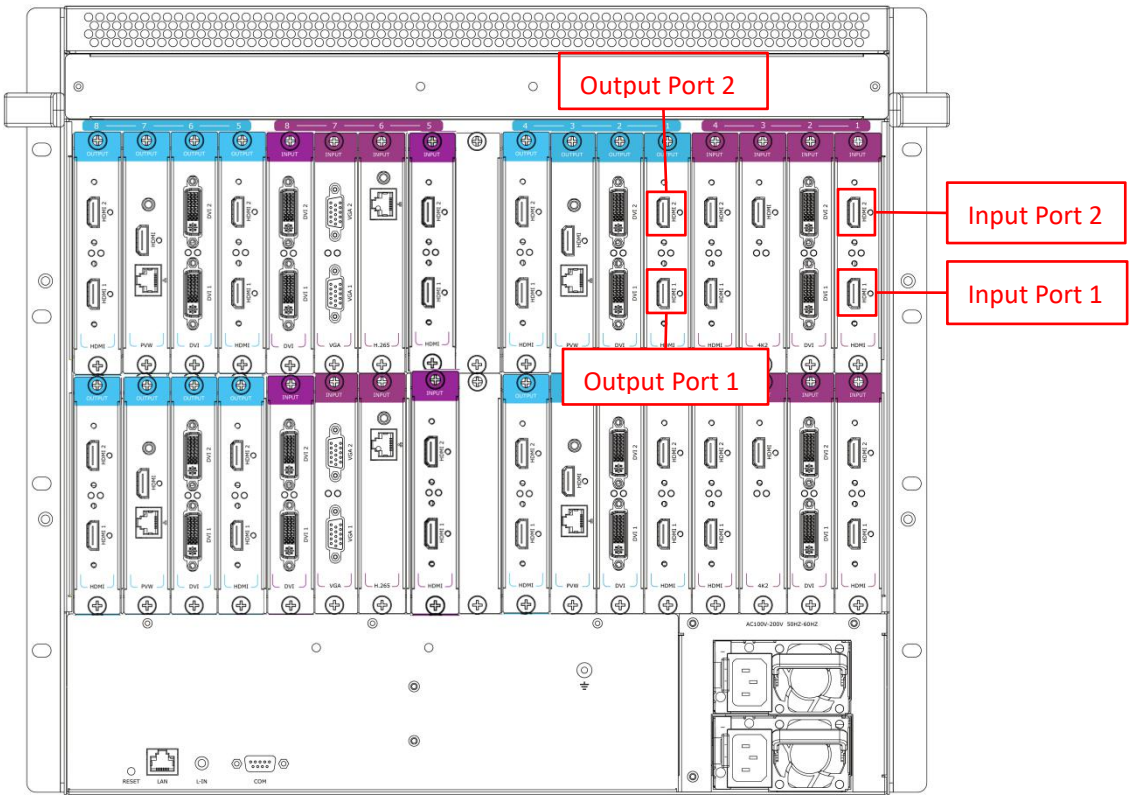
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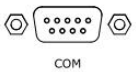
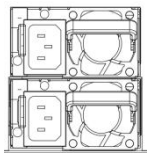
4U

Purple Input Port 1-16	Input slots 1-8,supporting DVI,HDMI, H.265 modules The model index is counting from right to left,the port index is from bottom to top,as shown in the picture.		
Blue Output Port 1-16	Output Slots 1-8,supporting DVI,HDMI modules The model index is counting from right to left,the port index is from bottom to top,as shown in the picture.		
Yellow COMM	Communication board with LAN port, to connect router or computer to realize software control		RS232 serial port for Open API command
	Dual power switch		Ground wire screw

Purple tip indicates input ,blue tip output



9U

Purple Input Port 1-32	Input slots 1-16,supporting DVI,HDMI, H.265 modules The model index is counting from right to left,the port index is from bottom to top,as shown in the picture.		
Blue Output Port 1-32	Output Slots 1-16,supporting DVI,HDMI modules The model index is counting from right to left,the port index is from bottom to top,as shown in the picture.		
	LAN port, connect router or computer to realize software control		RS232 serial port for Open API command
	Dual power switch		To avoid electrical shock, grounding the product before connecting to inputs and outputs

USE YOUR PRODUCT

Install XPOSE

Environment Requirements:

Window

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

Memory: 4 GB or more

Graphics: Support Direct X9 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 ,it will pop-up the installer language box, select the language, for example, select “English”, and click “OK” to confirm.



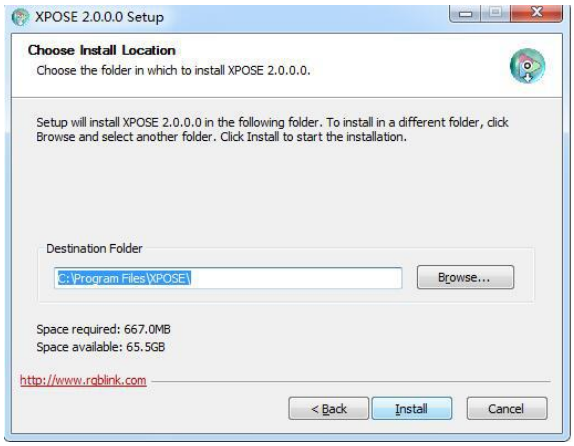
Click “Next” to install



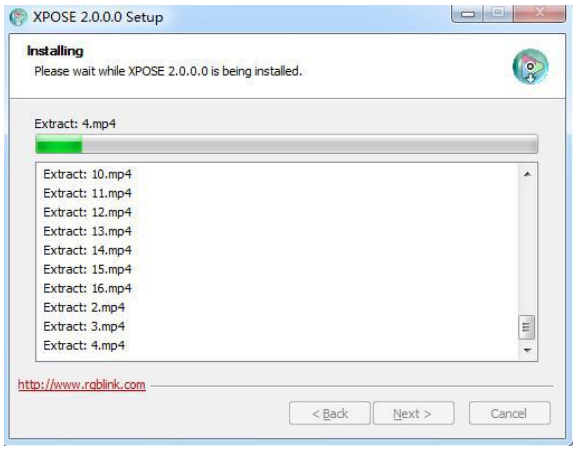
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Click “Browse...” to select the XPOSE software install location

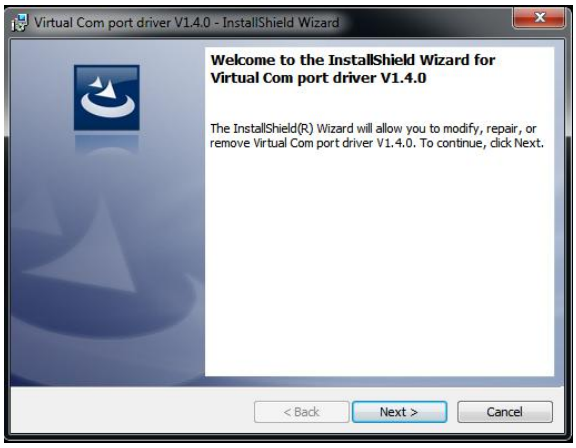
Click “Install”



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

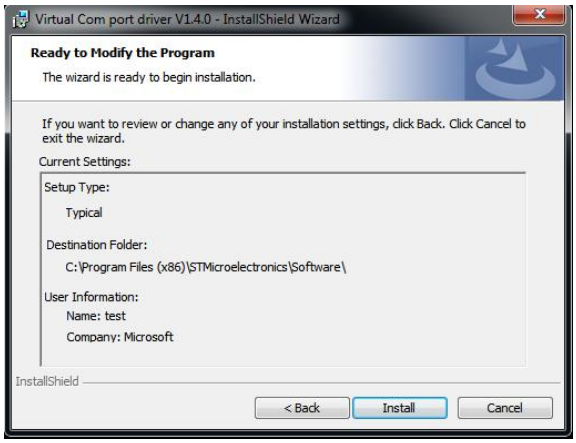


If user install the XPOSE software for the first time, click “Next



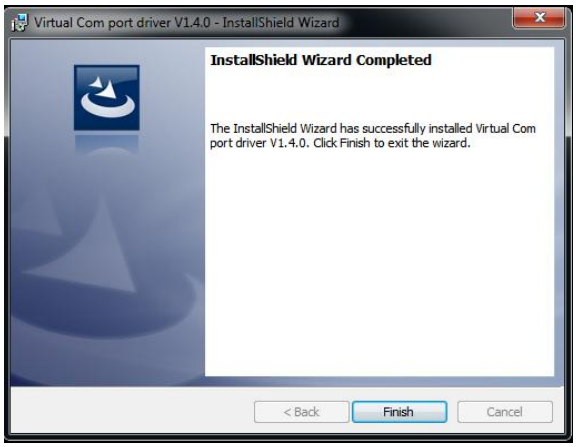
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Then click “Install", as shown in the figure below



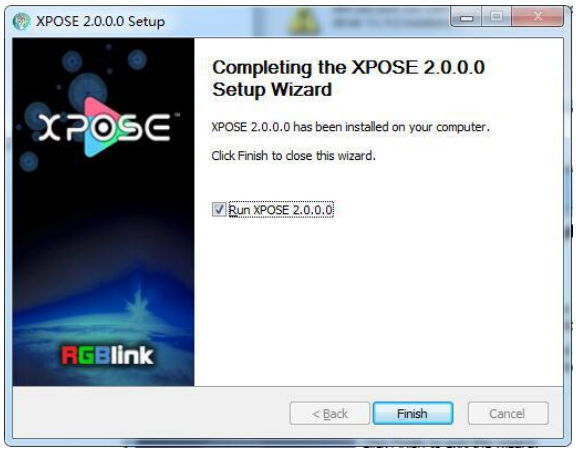


Click “Finish” and complete the installation, as shown in the figure below



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Click “Finish” and is ready to run the XPOSE



Login in XPOSE

Double click this icon 

,and enter the log on interface as follow

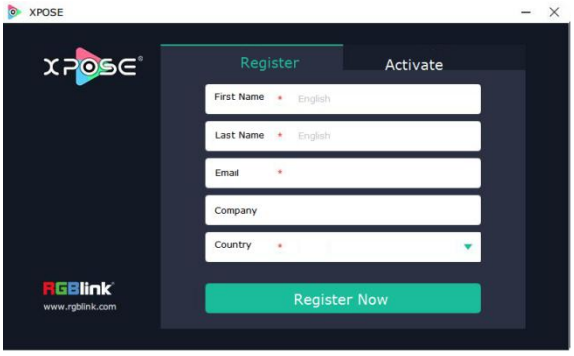
The initial language of XPOSE 2.0 is self adjusted based on the operation system language of the computer. **Click Register** and fill in the blank with first name, last name, email, company and country and then click **Register Now.**

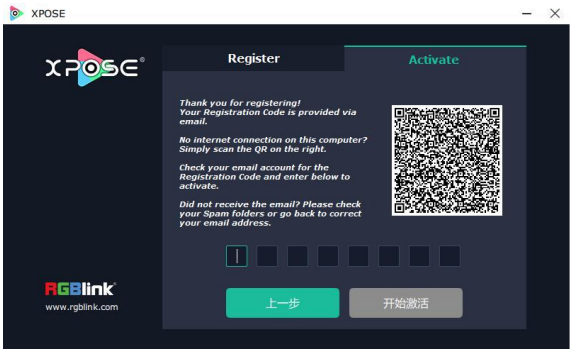
Please note that the email shall be invalid and complete otherwise Registration&Activation code cannot be received.

Click **Activate** and scan the QR code

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

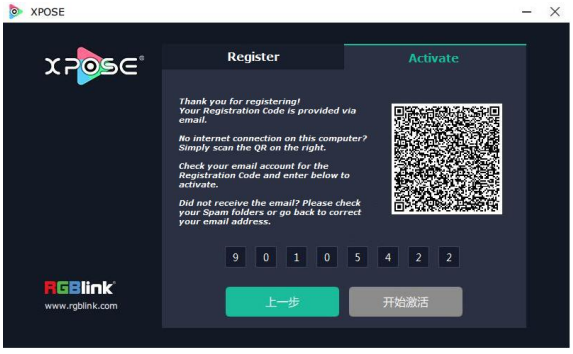
Type in the activate code and confirm.

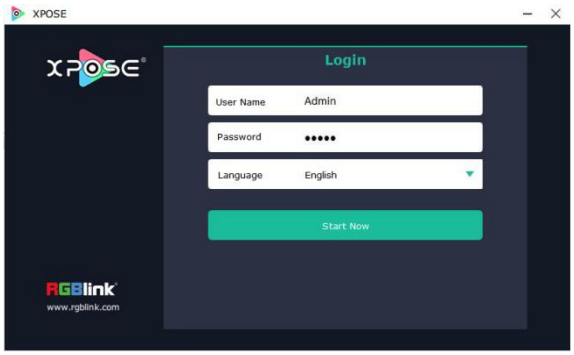




Keep the user name as “Admin” and password blank and then click **Start Now.**

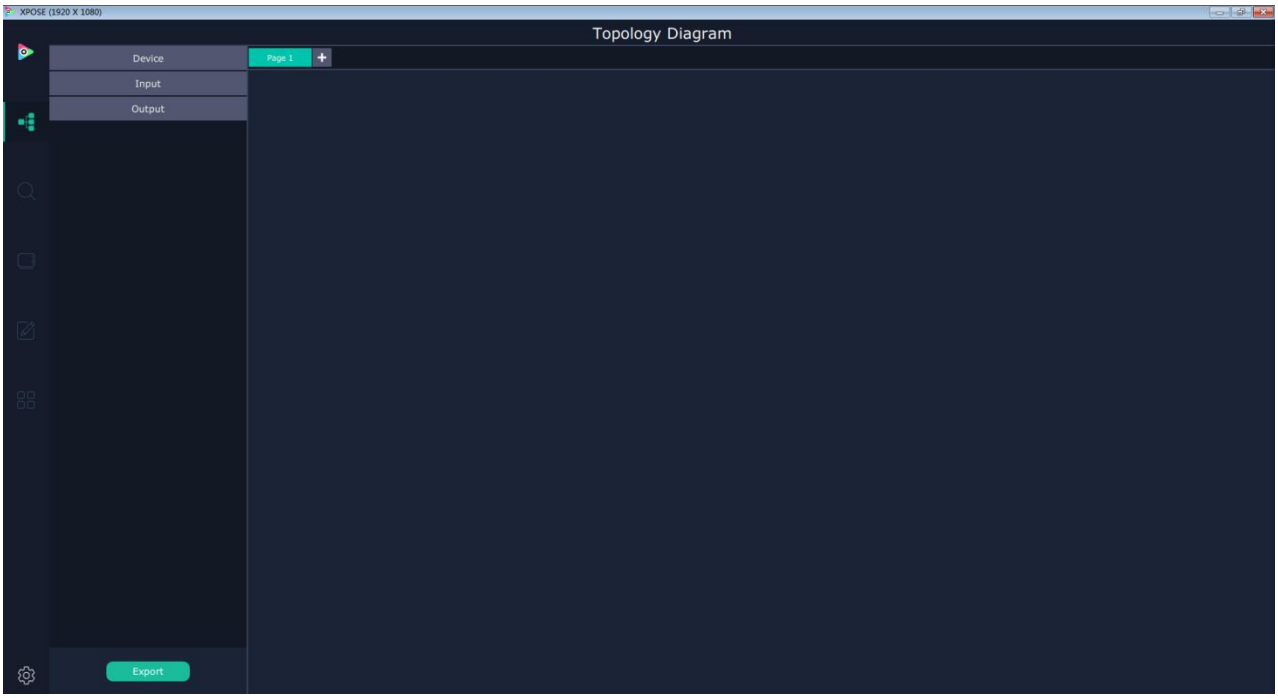
Note: If exact Name and Password are needed, users can set up them in Authorization Setting under System Setting.





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



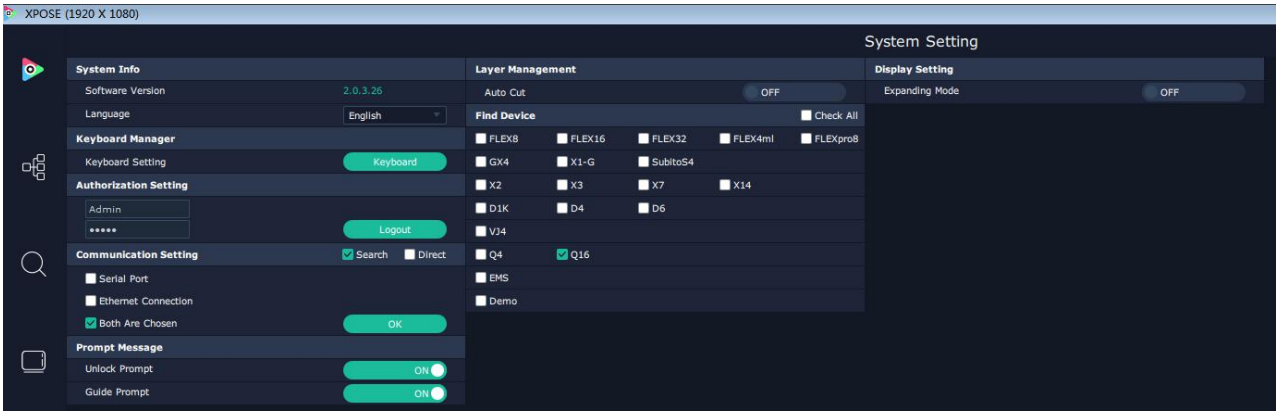
In the following text, we are going to show how to use XPOSE 2.0 to control Q16.

System Setting

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.

Then click icon  and enter the interface, choose the device Q16 in Find Device. Before system setting make sure physical connection of Q16 and XPOSE 2.0 is done, either by connecting Q16 to the PC which run XPOSE 2.0, or connect Q16 to router which offer same network as the PC in.



System Info: show the current software version

Language:Chinese, English and Russian

Communication Setting: Search or Direct, Search default.

Serial port, Ethernet Communication, Both are Choose. Both are Chosen default.

Layer Management:Auto Cut On or Off

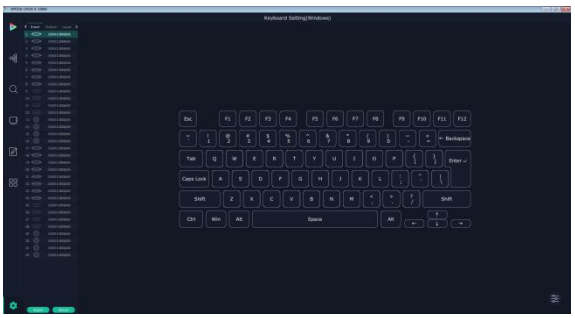
Prompt Message: Warning or Notice will show in yellow when Unlock Prompt and Guide Prompt are on.

Expanding Mode: If there is expanded display connected, turn on expanding mode, XPOSE interface will show on the display.

Keyboard Manager

click keyboard 

it will redirected to keyboard setting window.



Keyboard setting is designed to fit for different operation systQ16 such as Windows and Mac. Users can set short

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

Input, Output, Layer.



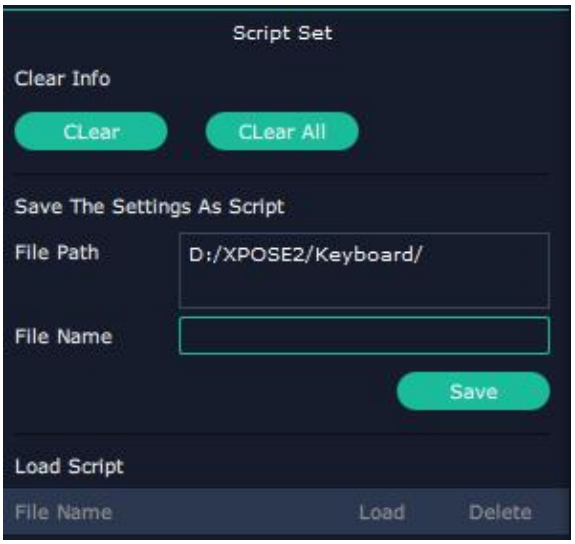
Please note the keyboard area where allows to set short cut keys



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.



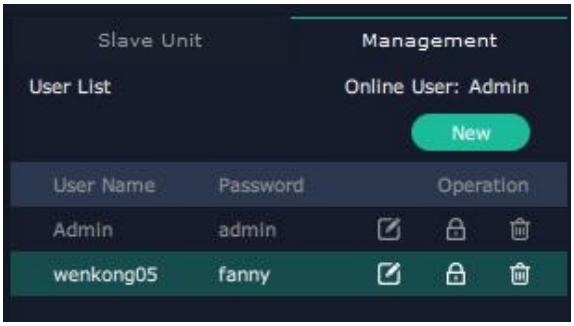
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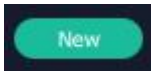
Authorization Setting

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 users are allowed to operate.
Click the green block to remove the function not to be permitted.

Slave Unit

Click **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



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. Q16 has not been imported to Topology Diagram yet but to unlock following settings dragging any device from the device list to the window can do.

Output| Input|Overview

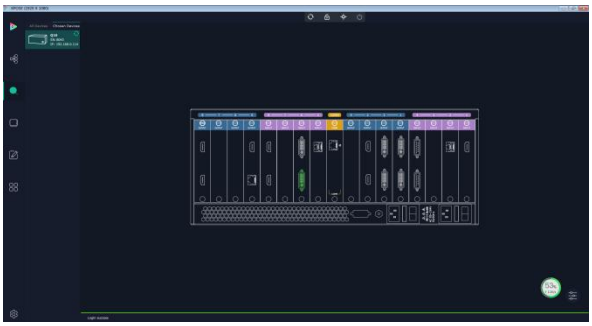
Connect the Device

After the device is selected in Find Device under System Setting, the device can be searched on XPOSE 2.0. Click the  and click refresh 

to check all available devices in the network.

Click  to choose the device and in Chosen Device click the device to obtain the control of this device.

Following is 4U and 9U model for your reference,and the operation takes 4U as an example.



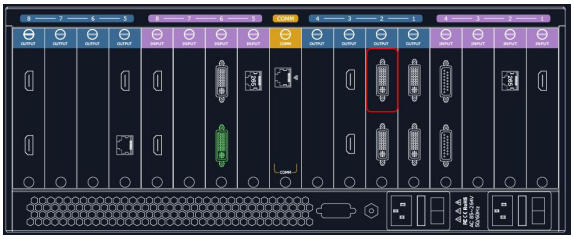
4U



9U

Output Setting

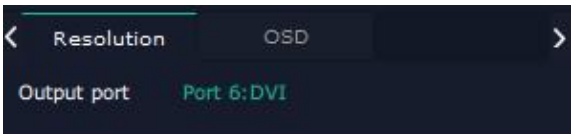
Click any output port, the board where the port locates is selected. Users can do settings to the port now.
A red rectangle flashes around the chosen port when it is clicked.



When a DVI or HDMI port is selected, users can do the

Resolution

Q16 doesn't support resolution setting.



OSD

Operation Mode: Single Output, Multiple Output

Single Output: means the OSD setting only take effect on the current output port.

Multiple Output: means the OSD setting take effect on the whole Display Area where current output port is.

Position

Vertical Distance: the vertical distance between OSD and the top border of display.

Font Style

Font: basically the fonts here are those in your computer.

Size:0~300 Pixels

Color:click the square behind to choose color

Background

Transparent:0~255

Color:click the square behind to choose color

Scrolling

Speed:Static, Slower, Slow, Fast,Faster

Direction:Left Scroll On Top, Left Scroll On Bottom

Roll Up

Input Text

OSD text.



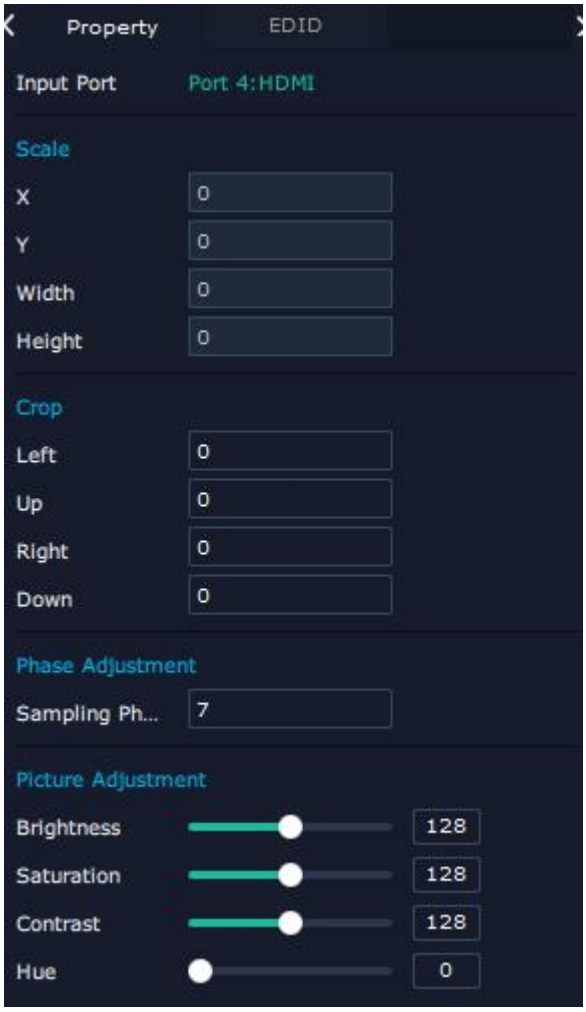
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Input Setting

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.
Different input modules port could have different input setting on Q16 subject to their features but generally there are such input settings as: Property Setting, EDID Setting.
Here are figure listing the of input ports and their output setting supported.

Property Setting
When HDMI 1.3 or DVI port is selected

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
Phase Adjustment
Sampling Phase:0~31
Picture adjustment
Brightness:0~255
Saturation:0~255
Contrast：0~255
Hue：0~255



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EDID

Basic Parameters

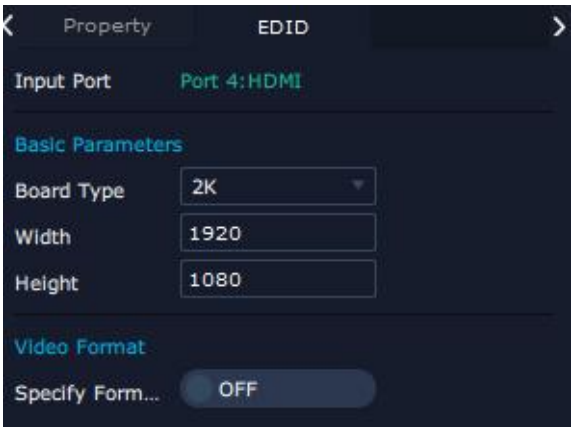
Board Type:4K or 2K

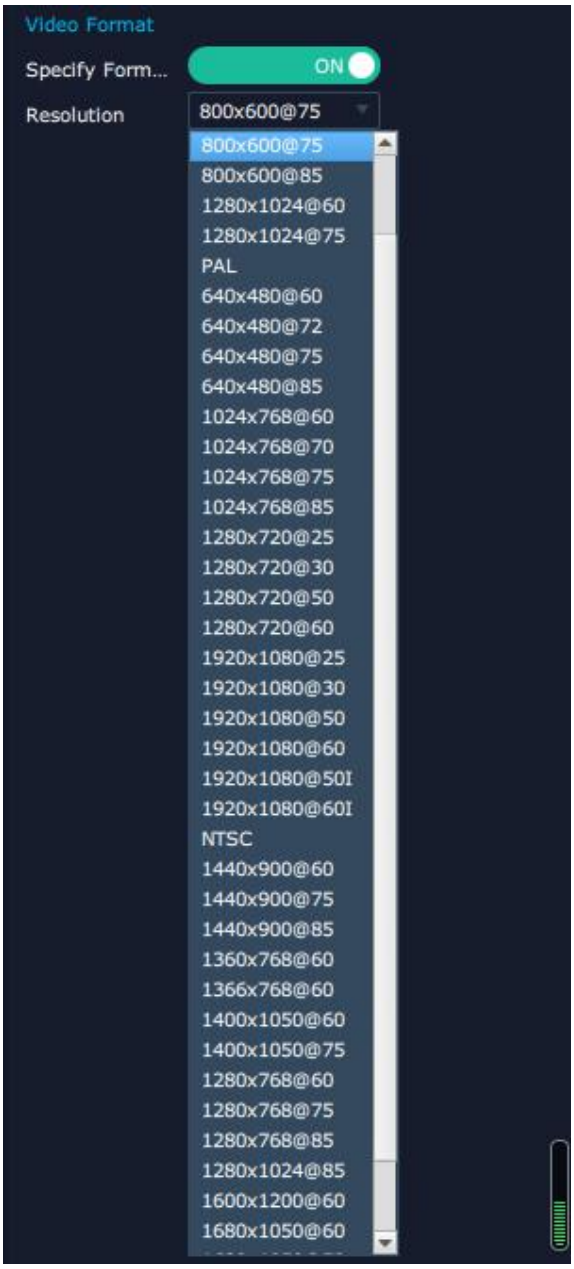
Width:default 1920 for 2K, 3840 for 4K

Height:default 1080 for 2K, 2160 for 4K

Video Format

Specify Format: turn on and there is a resolution list to choose.





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Property Setting

When HDMI 1.4 port is selected



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

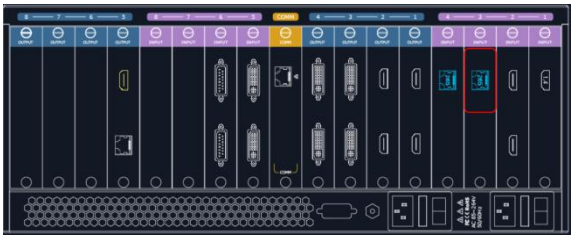
Height:vertical size after crop

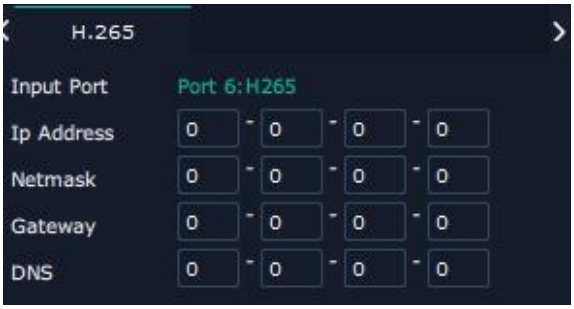
Phase adjustment

Sampling Phase:0~31

H.265 Setting

When there is H.265 input module installed on Q16, through the module, Q16 is able to search and take the video signal from webcam in the same local network. To make sure H.265 module take effect, IP setting is required. IP of H.265 should in the same network section, for example:network IP is 168.192.0.1, IP of H.265 shall be 168.192.0.X (X≠1） .





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Device Overview

Click Return 

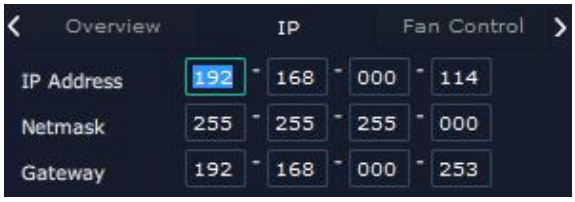
, there are overview, IP, Fan Control,Factory Setting,

Overview show

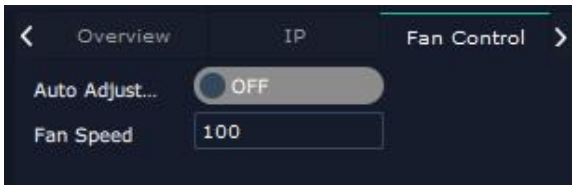
Device Info including version and Mac

Input modules info and output module info

IP:Show IP Address, Netmask, Gateway



Fan Control



Auto adjustment is not supported,Fan speed 0-99

Factory setting



Note:IP default:192.168.0.100.After IP address is changed,re-plug the power and restart the

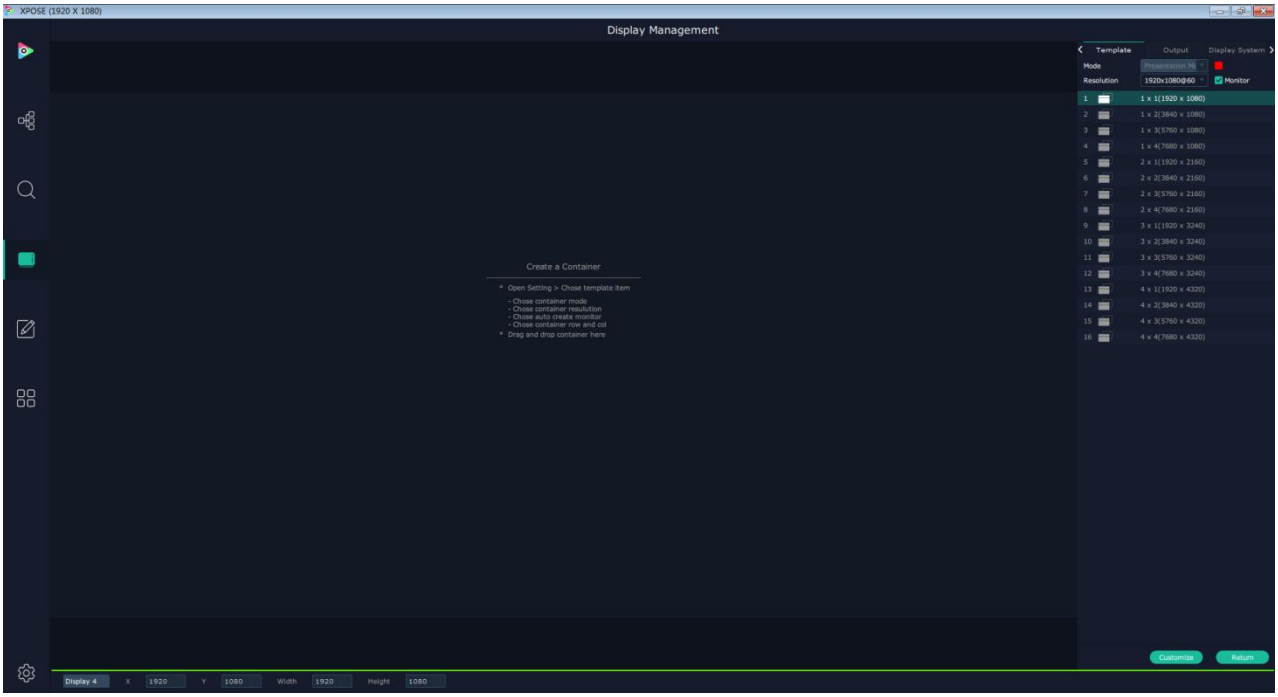


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Display System

Display System is for users to set layout of outputs.

Click this icon first and then click enter the interface.



Template

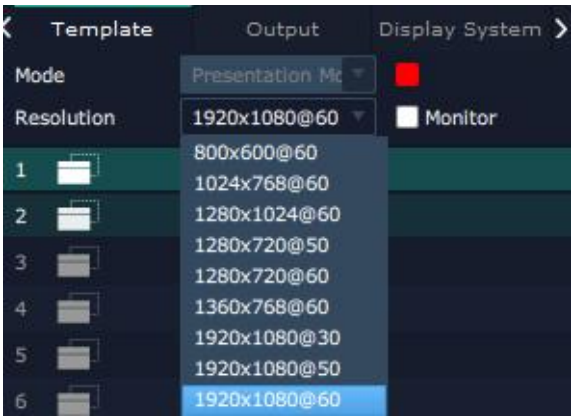
There are 16 types of basic “Display Area” which is used to contain output interface,and could be regarded as layout of output. Drag a template to create a container in other word a display area.

Mode

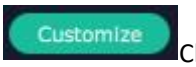
XPOSE 2.0 allows multiple modes running on one same interface, to differentiate each mode, different color is given to each mode based on different devices. At present, In Q16 support only Presentation Mode.

Monitor Resolution

Choose the output resolution for monitors



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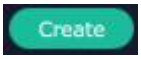
Click this icon at the bottom of template list.

Choose Monitor Type:LED or LCD

Monitor Layout:Auto or Manual

1. Choose Led and Auto

Fill in the H Total, V Total, Row and Column, then click



a customized container is created.

If this container need to be saved, click

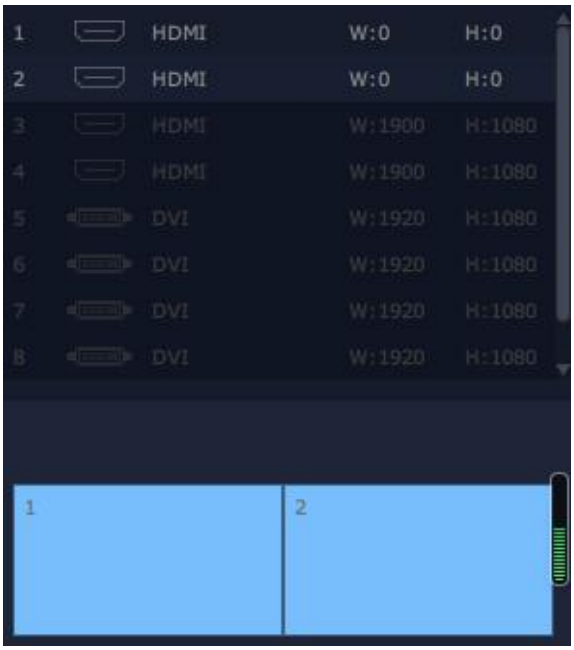
SAVE 

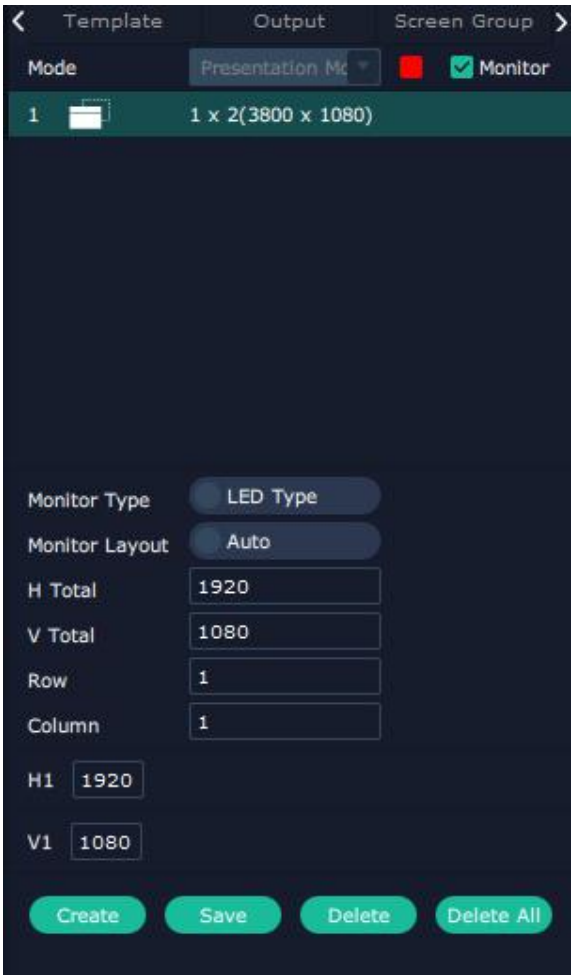
2. Choose LCD and Auto

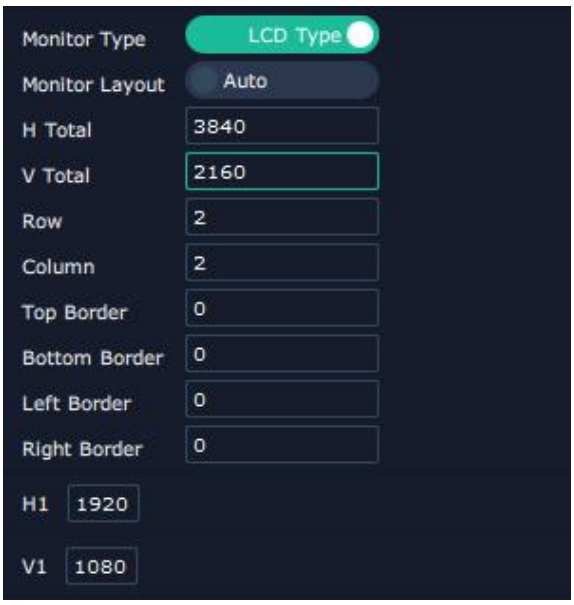
There are Top Border, Bottom Border, Left Border, Right Border available to adjust the customized container.

3. Choose Manual

There will be a simulated display area showing up at the bottom of the column. After fill in the H,V total and Row Column, drag the available monitor to the display area.



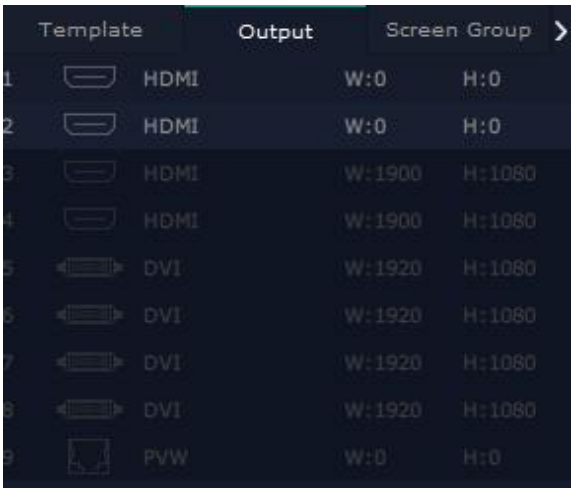




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Output

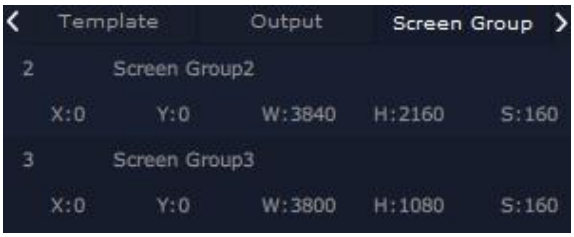
Show all the output ports on the device. Once the monitor is dragged into container meaning this output is used and the output port gets dark.



Screen Group

Q16 support to manage 4 screen groups at most on XPOSE.

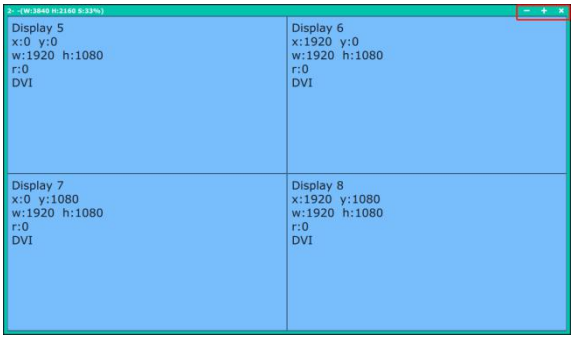
It allows users to edit the name of the Screen group that has been created just click the .



Adjust Screen Group window on XPOSE interface

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.

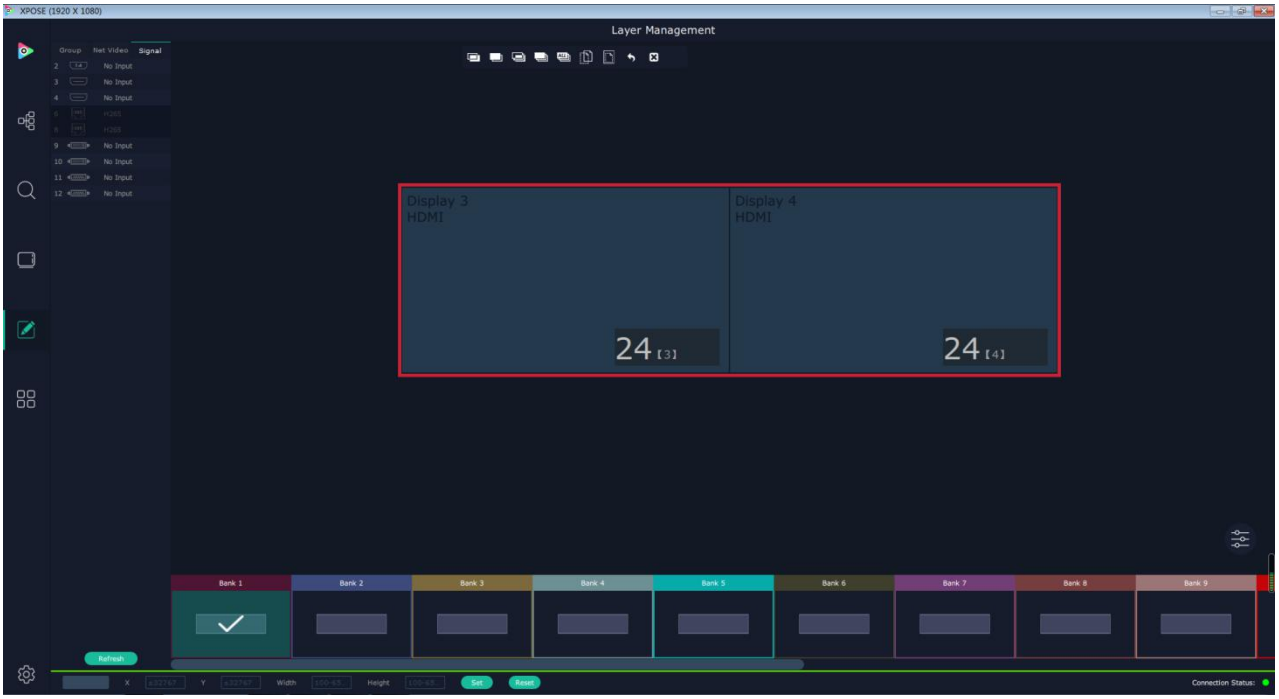


Cancel a Screen Group

Long pressing the  to cancel the screen group.

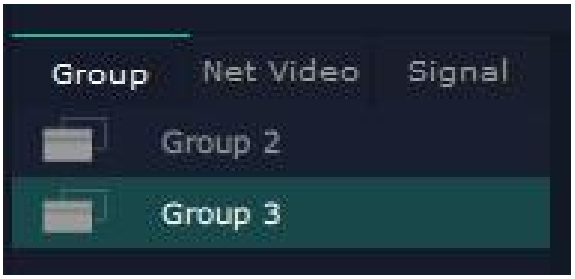
Layer Management

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



Group

When enter Layer Management interface, the window is blank. The screen group created in Display System shall be dragged from the **Group.**



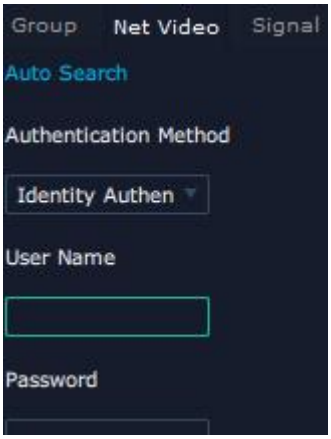
Signal

Signal list, showing all input signals currently. Drag the signal to the display.

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Net Video

If there is H.265 input module installed on Q16 and connecting to local network where there are webcam source availalbe. Click “Search”, there is Authenticafication Method required. Choose Anonymous Access, the webcams without user name and passoword could be found. Choose Indentity Authentification User Name and Password are required, for example fill in the User Name and Password with “admin”, those webcams with same user name and password can be found and listed.







If Auto Search cannot find the desired webcam, users can manually add the webcam by filling in
Name(usually IP address)
Transport Mode (RTP/UTP by default)
Main Media Stream URL
Main Width
Main Height
Sub Media Stream URL
Sub Width
Sub Height

Save to Bank Automatically

Choose bank first and then drag the signal to display. Chose another bank, previous bank can be automatically saved.

Layer numbers

Numbers in the corner is to show how many layers at present allowed to put in the output.



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

1.  this icon means data related, when width is changed, height will be changed as same proportion.

2.  this icon means data not related, width and height need to be filled respectively.



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Quick

For quick layer layout

Monitor： Choose the monitor to do quick layout. Choose single current monitor or choose ALL.

Choose All, the quick layout setting will take effect on the whole screen group.

Source： Choose Signal or Video

Signal is from those HDMI, DVI, VGA input module

Video is from webcam source.

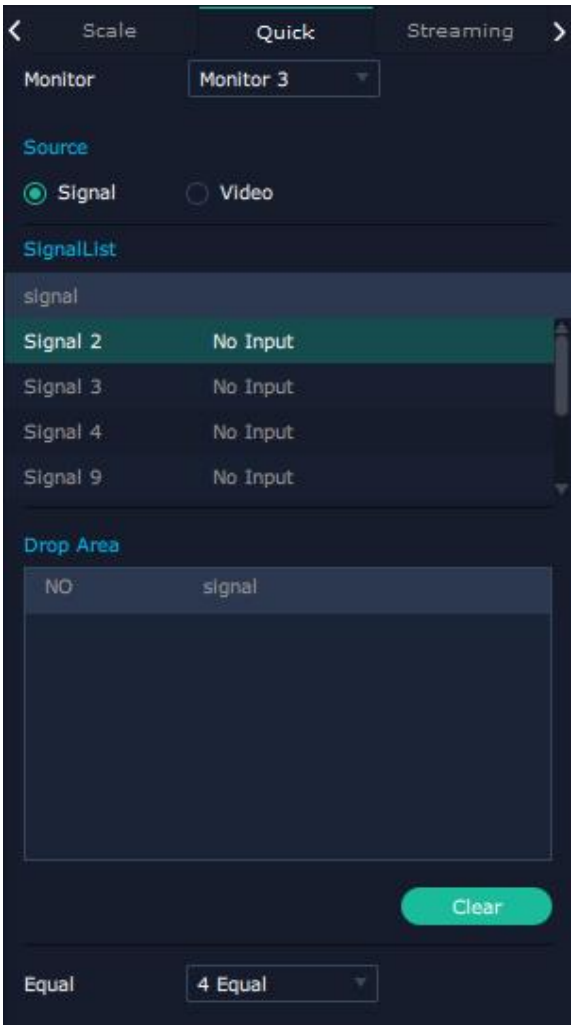
Drop Area

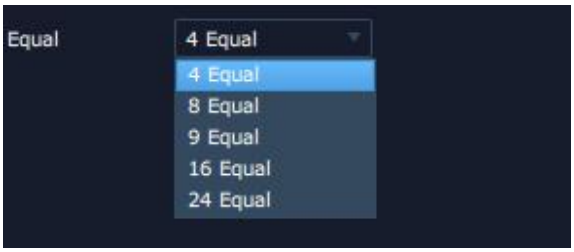
drag signal or video from above signal list or video list to drop area. Those signal or video will be equally placed on the monitor in order.

Equal

4 Equal,8 Equal,9 Equal,16 Equal,24Equal.

Equal here means Equal sized layer





I.e.: Monitor-ALL,Source-Signal,Drop Area- 2,3,4,9, Equal-8,as following:



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Streaming

Works when there is H.264 streaming module installed on Q16.

Module Index: H264

Image Quality: Smooth Hi-Q,Normal, we suggest Smooth

Layer Preview: preview the layer when signal is drag into monitor.

Input Preview:preview input in the signal list

Scene Preview:preview each scene in the BANK

Expand Preview: preview 16 input on expanded display

H.264:the master switch of all preview, turn on after desired preview is on.



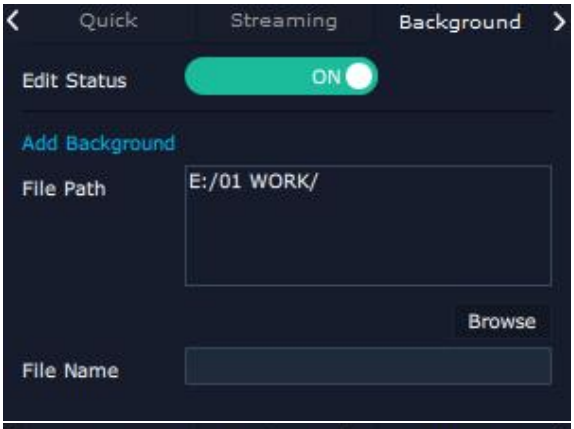
Background

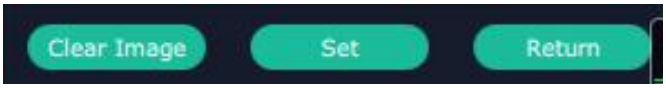
Edit Status

Turn it on, and ADD Background picture can be done.

Click Browse to open up local file and upload a picture as background. Background does not occupy layer. Background can be adjusted in scene group window.

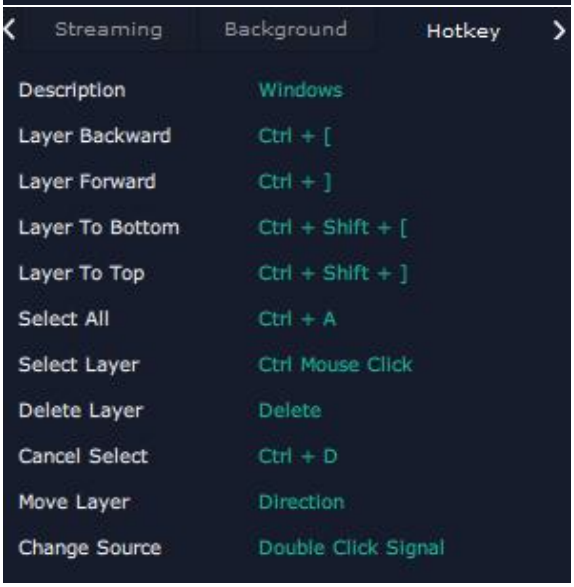
After Background adjustment is done, click Set.





Hotkey

short cut keys on keyboard to do layer management.



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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 sceen group with the one signal

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.

Other Operation on Layer

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

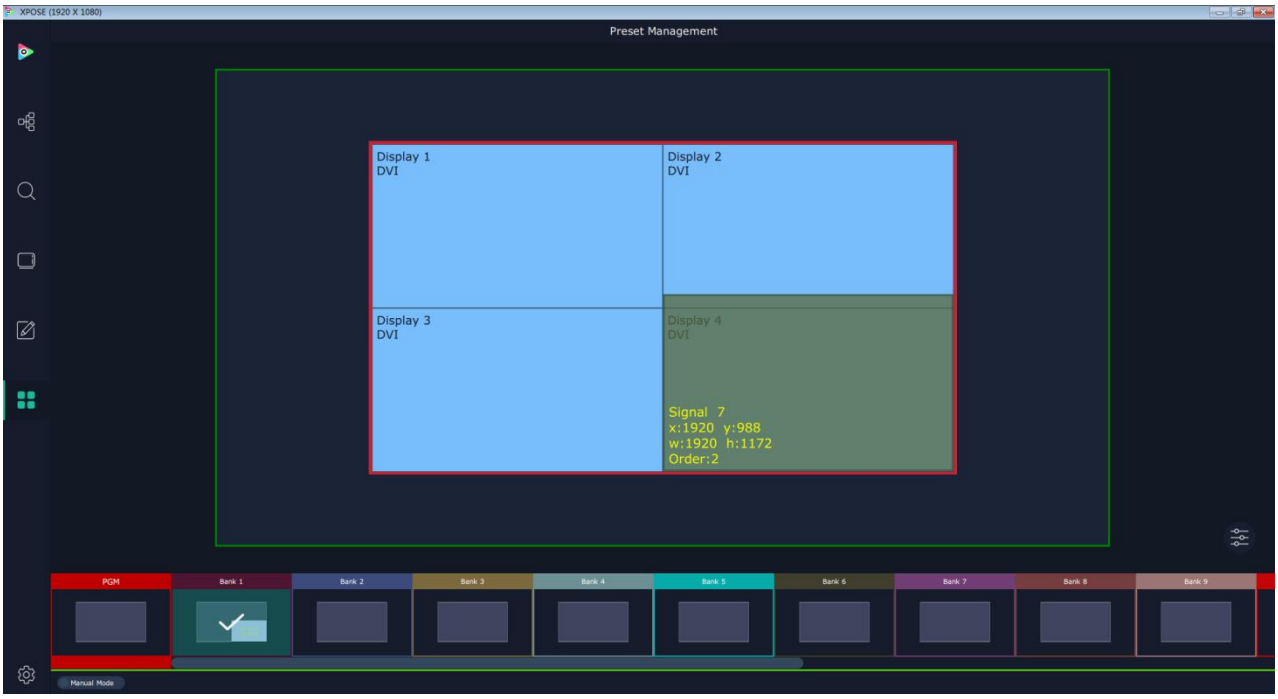
	Layer Backward		Layer to Top		Paste Selected
	Layer Forward		Select All		Cancel Selected
	Layer to Bottom		Copy Selected		Delete Selected

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Preset Management

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

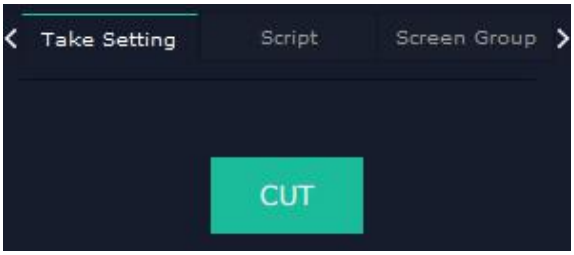
Preset Management Mode： 1 Manual Mode, 2 Schedule Mode



Manual Mode

Switch Manual Mode or Schedule Module by

the bar in the left bottom corner of the window.



Cut

Cut, switch from PST to PGM immediately

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Save Script and Load

Save Script

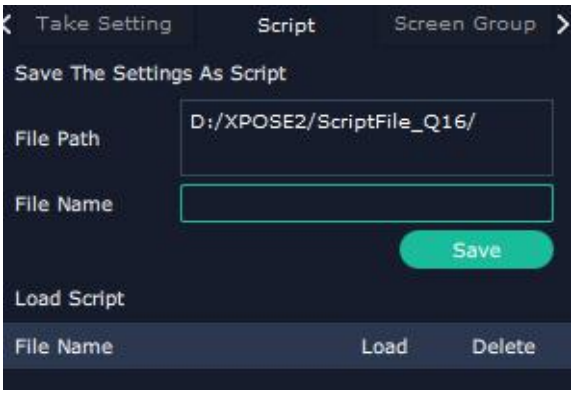
Click Script ,fill in the blank with the name of setting and Save

Load and Delete Script

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

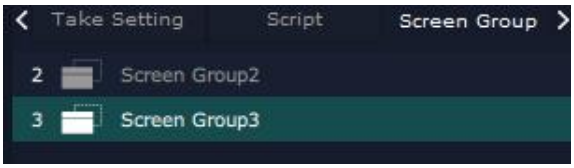
Select the file and click Load

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



Screen Group

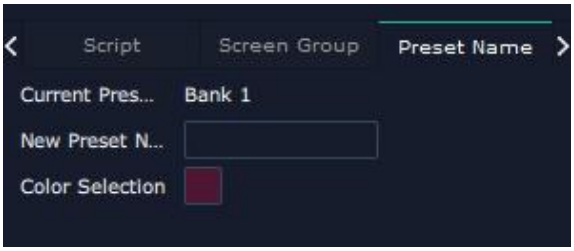
Choose the Screen Group for Preset Management



Preset Name

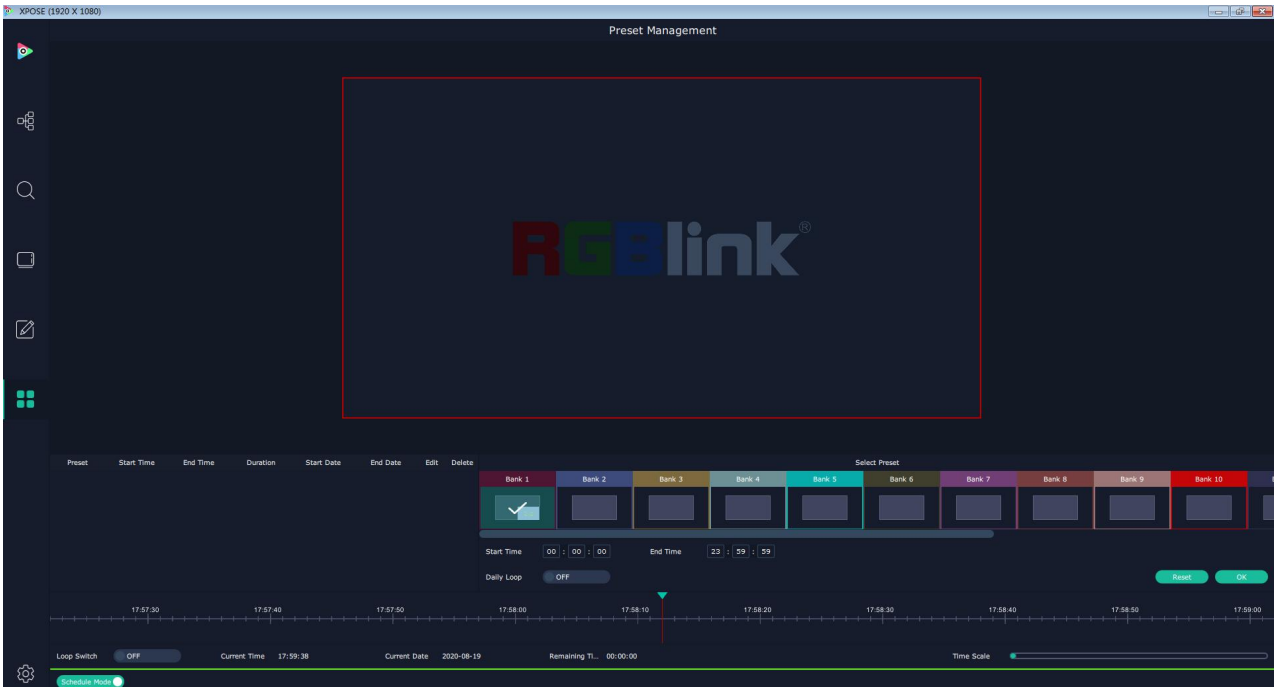
Select a bank and click Preset Name , fill in the blank after New Preset Name to rename a Preset (Bank)

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



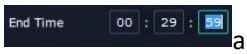
Schedule Mode

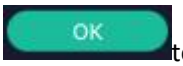
This mode is designed to set auto bank (scene/preset) switch.



Select the bank that need to be looped.

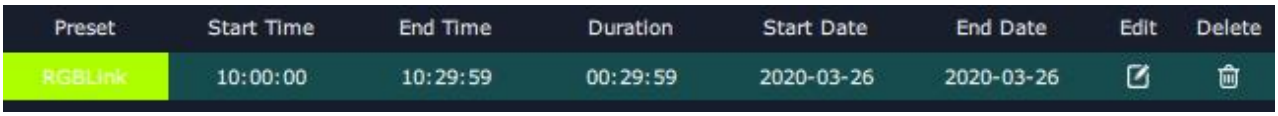
Set **Start Time** 

and **End Time** 

and press **OK** 

to confirm.

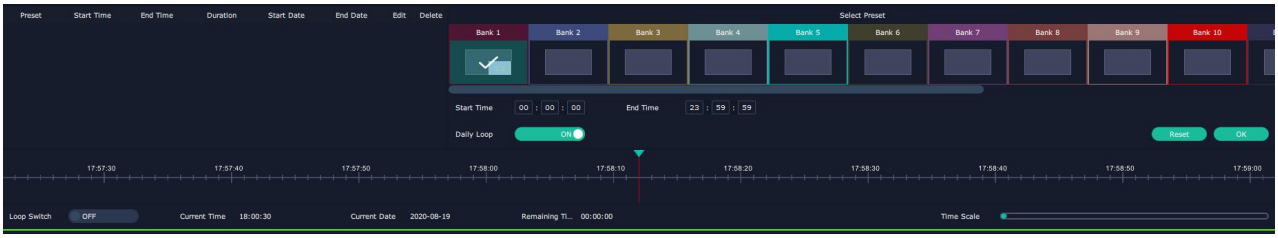
The Preset can be added into the loop list after confirm.




click this icon to edit Start Time and End Time if needed.


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

Turn on Daily Loop and Loop Switch.



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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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