Quick Start

- 4K ready with quad link HDMI 2.0 input
- 8K single link with HDMI 2.1 and DP 1.4 input
- HDR 10 & HLG compliant
- 6+2: Up to 6x4K layers on any output port, with 2 additional layers can be added (select 2x4K2K signal sources from the existing 6 signal sources)
- Each input module support up to 4x4K2K@60
- HDMI 2.0 output module support up to 2x4K2K@60
- Fully customisable in/out resolutions & EDID management
- OSD overlay features
- XPOSE 2.0 control
- GENLOCK/SYNC
- I/O Module Based Design and hot swap capacity
- Support redundant power supply module
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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 **throughly 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.

8K & 12G Camera Project
LED & LCD Compatible

Multi-4K Source to Different Screens

Multi-Control
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

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>TFT-LCD panel to show the info of input and output modules, device status, weather and so on.</td>
</tr>
</tbody>
</table>
| 2 | ● 1×USB 2.0 port for upgrade;  
    | ● 1×USB 3.0 port (blue) to be developed. |
Chassis Module Structure

<p>| | |</p>
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</table>
| 1 | ● 6 input module slots up to 24 inputs totally;  
| 2 | ● 6 output module slots up to 12 outputs totally;  
   | ● Optional Output modules: Dual HDMI 2.0 Output Module, Dual DP 1.2 Output Module (preliminary). |
| 3 | Communication ports including GENLOCK, LAN, RS232, CTL, USB 3.0 and HDMI. |
| 4 | CXP ports (to be developed). |
| 5 | Slot for power supply module and power switch. 1200W redundant power supply module is optional. |
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 Device】.

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.
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@60 to 7680×1080@60
Format for Module: 1024×768@60 to 7680×1080@60

DE Setting
**Port:** Choose current port or Port All  
**Bits:** 8bits/10bits/12bits  
**Color Space:** RGB/YUV 4:2:2/YUV 4:4:4  
**HDR:** SDR/HDR 10/HLG

**OSD Setting**

![OSD Setting interface](image)

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: Select more font color  
**Background**  
Transparent: Background transparent  
Color: Select more background color  
**Scrolling**  
Scroll Speed: 0-16  
Scroll Direction: Scroll Off, Scroll Left
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, Backup, Power ON, Factory Setting. Overview: Show Device Info, module info of software and firmware version.

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: Clear the previous LOGO/EDID parameter
Save IP: No change of IP after reset

Display Management

Display System is for users to set layout of outputs. Click this icon first enter the interface as follow:
Container

![Create a 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 Customize at the bottom of template list. Fill in the H Total, V Total, Row and Column, then click Create a customized containers is created. If this container need to be saved, click Save.
For example create a 1×2, 7680×2160 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, it means this output is used and the output port gets dark.

Click this icon \(\times\) 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.

**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**

![Parameter image]

**Bar under XPOSE window**

Swap: Swap two output ports if needed.
Hotkey

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.
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.

Click this icon to confirm the alias setting.

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

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 6+2 layers.)
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 wrong operation.

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.

<table>
<thead>
<tr>
<th>Layer Backward</th>
<th>Layer Forward</th>
<th>Layer to Bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layer to Top</td>
<td>Select All</td>
<td>Copy Selected</td>
</tr>
<tr>
<td>Paste Selected</td>
<td>Cancel Selected</td>
<td>Delete Selected</td>
</tr>
</tbody>
</table>

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.

Hotkey

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).


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 ~ 10.05
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 Bank1 to RGBlink, with pink boarder.
Schedule Mode

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

1. Turn on “Schedule Mode”;

2. Choose “Times Loop” in Loop Mode;

3. Choose the BANK;

4. Fill in the “Duration”;

5. Click “OK”;

Users can click to edit and to delete. After settings done, turn on “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, 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:** To clear some keys, the keys need to selected before hand.

**Clear all:** 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 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: 192.168.0.112, SN:0027; the other with IP: 192.168.0.129, SN: 3344.

If you want the same operation on 3344 to be backed up to 0027, you can do as follows:
1. Set device numbers;
2. Select the IP of the device in the drop-down menu for Device IP;
3. click ON, the tow device are connected when the red pot turns to be green one;
4. click OFF to disconnect, it could not control two device at the same time.
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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