Q16pro 2022
Quick Start

- Each module supports up to 8 layers
- Support 4K@60 inputs and outputs
- Each layer supports for overlying, crossing and roaming
- XPOSE visualization operation
- Dual OSD scrolling
- Genlock synchronization
- Support deinterlacing
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Overview

Q16pro is a high-performance video image processing system and high-performance video splicing server using pure hardware and leading-edge FPGA processing architecture. Offering a range of input and output signals via a card-based structure, and supporting hot swap of modules, and options including redundant power supplies, Q16pro is a stable high-performance platform that can be deployed in varied applications including corporate and visual messaging as well in retail and digital signage applications.

The Q16pro models allow connection of 4K video sources as well as output to 4K, with outputs offering multi-screen and multi-layer capabilities. A host of features are built in to Q16pro, including EDID management, 3D image processing, and highly configurable OSD features at high-definition.

System Connection

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

Front Panel

Q16pro-4U

<table>
<thead>
<tr>
<th>Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LCD Touch Screen shows LOGO and main menu. Main Menu include: Device, Settings, Load, Upgrade, Language and Version.</td>
</tr>
<tr>
<td>2</td>
<td>USB Port: for device upgrade</td>
</tr>
<tr>
<td>3</td>
<td>Power Switch: to turn on/off device</td>
</tr>
</tbody>
</table>
# Rear Panel

**Q16pro-2U**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purple Input 1-3</td>
<td>Input slots 1-3, supporting HDMI, DP and other optional modules.</td>
</tr>
<tr>
<td>2</td>
<td>Blue Output 1-2</td>
<td>Output slots 1-2, supporting HDMI, DP and other optional output modules, supporting input modules.</td>
</tr>
<tr>
<td>3</td>
<td>Yellow COMM</td>
<td>Communication board with LAN and RS232 port, to connect router or computer to realize software control.</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Power Interface, support single power supply.</td>
</tr>
</tbody>
</table>
1 **Purple Input 1-4**  
Input slots 1-4, supporting HDMI, DVI, SDI, DP and other optional modules.

2 **Blue Output 1-5**  
Output slots 1-5, supporting HDMI, DVI, SDI, DP and other optional output modules, supporting input modules.

3 **Yellow COMM**  
Communication board with LAN and RS232 port, to connect router or computer to realize software control.

4 **Power Interface**  
Power Interface, 2U supports single power supply, 4U and above supports double power supply module.

**Note:** Purple tip indicates input, blue tip indicates output, yellow tip indicates communication.
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
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.
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.
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 Q16pro.
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 Q16pro in Find Device. Before system setting make sure physical connection of Q16pro and XPOSE 2.0 is done, either by connecting Q16pro to the PC which run XPOSE 2.0, or connect Q16pro 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 system such as Windows and Mac. Users can set short cut keys.

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.
Authorization Setting

Click 图标 to open up the authorization entry.

Management

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 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 192.168.0.45.

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

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

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

Q16pro-4U
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 following settings in the edit section after clicking the Resolution setting.

Resolution

Q16pro supports customizing resolution, and users can also use standard output resolution.

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 Q16pro subject to their features but generally there are such input settings as: Property Setting, EDID Setting.
Property Setting
When HDMI 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

EDID
Input Port: chosen port
Basic Parameters:
EDID Template: RGB-DVI or RGB-HDMI
Monitor Name: type the monitor name
Width/Height/Frequency: type in custom parameters to meet your needs.
Device Overview

Click Return, there are overview, IP, Fan Control, Backup, Power On, Factory Setting.

**Overview**: Show Device Info including current temperature and Mac, Main board info, Input modules info and output module info

**IP**: Support auto/manual setting. Show IP Address, Netmask, Gateway

**Fan Control**: Support auto/manual setting.
Fan Speed: 0-100

**Backup**: You can choose to turn on/off backup.
Backup Mode: Input Backup, Preset Backup

**Power On**: Set power-on time.

**Factory Setting**
Remove EDID: Clear the previous EDID parameter.
Save IP: No change of IP after reset.

Note: IP default: 192.168.0.100. After IP address is changed, re-plug the power and restart the device.
Display System
Display System is for users to set layout of outputs.

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. Q16pro: Presentation Mode and Matric Mode optional.

Monitor Resolution
Choose the output resolution for monitors
Click this icon at the bottom of template list.

Monitor Layout: Auto or Manual
Users can fill in the H Total, V Total, Row and Column in Auto or Manual mode, then click a customized container is created.

If this container need to be saved, click .

If Users 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.

Display System
It allows users to edit the name of the Display area that has been created just click the }
Adjust Display System 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:
Display Area
When enter Layer Management interface, the window is blank. The screen group created in Display System shall be dragged from the Display Area.

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

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 and Crop

Choose one layer needed to be adjusted, and type in its position and size.

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.

Layer Movement

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.

1. to crop the layer

2. Lock the layer to prevent misoperations

3. Max to cover up the monitor.

4. Cover up all monitors in the same screen 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

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

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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**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.

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**Hotkey**

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**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.

<table>
<thead>
<tr>
<th>Preset</th>
<th>Start Time</th>
<th>End Time</th>
<th>Duration</th>
<th>Start Date</th>
<th>End Date</th>
<th>Edit</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGBLink</td>
<td>10:00:00</td>
<td>10:29:59</td>
<td>00:29:59</td>
<td>2020-03-25</td>
<td>2020-03-26</td>
<td>🔒</td>
<td>🔴</td>
</tr>
</tbody>
</table>

- 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.
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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