



Shenzhen Bitvisus technology limited. Video News Co., Ltd

BIT-VWC-U1-112

Rotating splicing processor

CATALOG

1. Product Overview.....	3
1.1. Product features.....	3
1.2. Application scenarios.....	4
2. Specifications.....	5
3.Operation instructions.....	6
3.1. Product panel description.....	6
3.2. Connection instructions.....	7
3.3.Web usage of BIT-VWC-U1-116 stitching processor	8
4. Common problems.....	12
4.1 Red light problems.....	12
4.2. Green light problems.....	13
4.3. Computer graphics card problems.....	13
4.4. Display problems.....	14
5. Problem solving.....	15

1. Product Overview

1.1. Product features

1. This is an industrial-grade high-performance product with ultra-high-definition resolution and supports up to 8Kx2K.
2. The maximum support is 1 in and 12 out, and multiple splicing modes can be arbitrarily combined (such as horizontal screens or vertical screens or special-shaped splicing), and support massive parallel use.
3. Centralized power supply with wide voltage (100 ~ 240V), low power consumption, energy-saving and environmental protection design. Conductive heat dissipation is used internally, without any external heat dissipation measures, and its reliability is extremely high.
4. Support wired network control.
5. Adopt high-end programmable FPGA chip with 28nm technology, full hardware real-time processing architecture, ultra-fast processing speed without delay.
6. Industrial design, thickened 6-layer PCB board, 12KV super strong anti-static ability, super product stability.

7. Supports large-scale parallel use to ensure real-time display requirements for large screens.

8. Odd-numbered picture dedicated solution, support odd number picture (5 screens or 7 screens, etc.) perfect point-to-point zero distortion display mode.

1.2. Application scenarios

Ultra-high-resolution desktop applications, large screen walls, command and dispatch systems, multi-screens video surveillance, engineering display applications, multi-channel projection, VR, ring screen theaters, large advertising walls, LCD / LED multi-screens, etc.

2. Specifications

Product name	BIT-VWC-U1-112
Input Max. Pixel FPS	600MHz
Output Max. Pixel FPS	165MHz
4x3 Max supported resolution	3840x2880@50Hz
3x4 Max supported resolution	5120x2160@50Hz
3x3 Max supported resolution	5760x3240@30Hz
4x2 Max supported resolution	3840x4320@30Hz
2x4 Max supported resolution	7680x2160@30Hz
2x2 Max supported resolution	3840x2160@60Hz
Factory default resolution	3840x2160@60Hz
Support custom resolution	√
Input interface type	One DP Interface One HDMI Interface One RJ45 Network port One RJ45 Debug port
Output interface type	4~16 HDMI outputs
Size(L*W*H)	482.6mm*396.8mm*44mm
Weight	5kg

Power supply	100~240V
Warranty	One year

3.Operation instructions

3.1. Product panel description



A: 220V power interface.

B: HDMI / DP input interface.

C.D: HDMI output interface.



A: Signal indicator.

B: RJ45 network port, wired network control mode.

C: DEBUG

3.2. Connection instructions

1) The computer graphics card output is connected to the BIT-VWC-U1-112 input.

2) The BIT-VWC-U1-112 output is connected to the display device, and the BIT-VWC-U1-112 output port number is connected to the corresponding display.

3) BIT-VWC-U1-112 is connected to 220V power supply.

4) After the correct connection is completed, the power light, signal light and output light will always be on.



3.3.Web usage of BIT-VWC-U1-112 stitching processor

Step 1: Use a network cable to connect the computer and the device, and connect to the NET port on the front panel of the device, as shown in the figure below.

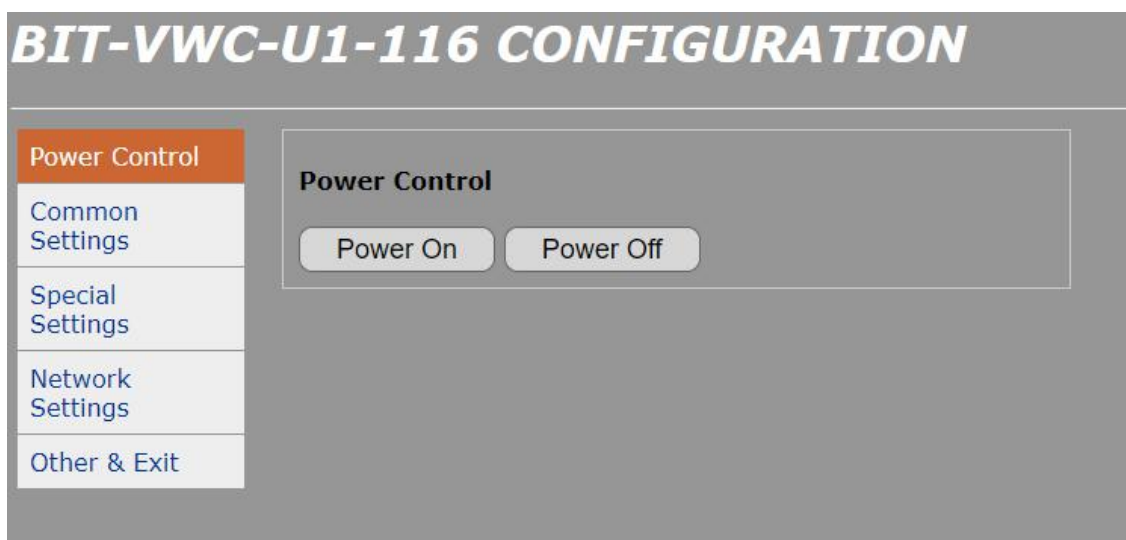


Step 2: Open the network connection panel and set the local connection IP to 192.168.1.x.

Step 3: Open the browser, enter the address <http://192.168.1.192>, enter the login interface, type the password and click OK.



Step 4: <power control> you can control the power of the device on or off.



Step 5: <Common Settings> set the row and column stitching mode and the output resolution information. (The start screen is only used when cascading)

BIT-VWC-U1-116 CONFIGURATION

Power Control
Common Settings
Special Settings
Network Settings
Other & Exit

Common Settings

Splicing Mode Settings (Y:Row X:Col) : Row* Col

Start Screen Number (1~N) : Screen

Single Screen Output Resolution (X:Width Y:Height) :

X Y

Output Frame Rate : Hz

Step 6: <Special Settings> settings: Supports arbitrary coordinates interception within the effective range, and supports arbitrary adjustment of the output image size.

BIT-VWC-U1-116 CONFIGURATION

Power Control
Common Settings
Special Settings
Network Settings
Other & Exit

Special Settings

Screen Number:

Starting Coordinates(X) : (Y):

End Coordinates(X): (Y):

Output Resolution(W): (H):

Output Frame Rate : Hz

Output Size(W): (H):

Fixed Output Resolution: ☐

1) Screen Number: The screen number that needs to be adjusted, corresponding to the DVI output port of the device.

① For example (1 in and 16 out): facing the wiring panel, the

left input card areas OUT1 ~ OUT4 are 1-4, the lower right output areas OUT1 ~ OUT4 are 5-8, and the upper right output areas OUT1 ~ OUT4 are 9- 16.

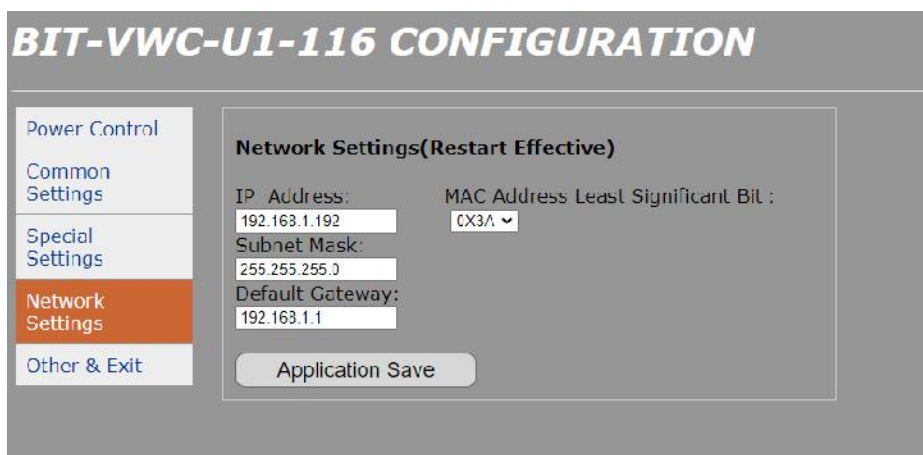
② “0” means that all outputs are uniformly adjusted.

2) Starting coordinates (X \ Y) and End coordinates (X \ Y): intercept a part of the current input image.

3) Output resolution: It means the resolution of single screen output display.

4) Output size: indicates the size of the effective screen display of the image, which is valid within the output resolution range.

Step 7: <Network Settings>, set current device IP information



The screenshot displays the configuration interface for the BIT-VWC-U1-116 device. On the left, a sidebar contains navigation options: Power Control, Common Settings, Special Settings, Network Settings (highlighted in orange), and Other & Exit. The main area is titled 'Network Settings(Restart Effective)' and contains the following fields:

IP Address:	192.168.1.192	MAC Address Least Significant Bit :	CX3A ▼
Subnet Mask:	255.255.255.0		
Default Gateway:	192.168.1.1		

At the bottom of the main area is an 'Application Save' button.



4. Common problems

4.1 Red light problems

1. Check the power cord, you must use the 12V power cord delivered.
2. Check whether the power of multi-screen treasure is stable (whether the voltage is stable, etc.).
3. Replace the other 12V power adapter and test whether it is a problem with the power adapter.
4. The equipment light is damaged, or other equipment malfunctions.
5. Multi-screen treasure input data line must use the delivery line

4.2. Green light problems

1. The input signal lamp is damaged, or other faults (EDID chip is damaged, etc.).
2. The input signal light is damaged, or other malfunctions (computer graphics problems, device resolution problems, secondary equipment problems, signal cable problems, etc.).
3. When there is input (the input indicator is always on) and there is no output (the output indicator is blinking / off), check whether the computer graphics card has an output. You can connect the graphics card output to a monitor that can be used normally to see if there is an output. If several output ports are normal, you can exchange the normal output port with the abnormal output port. After the exchange, the abnormal port can output normally, it may be a problem with the output line. Replace the output line.

4.3. Computer graphics card problems

1. Check whether the graphics card requires additional power supply. Multi-output graphics cards with multiple output ports generally require additional power supply. If there is an output port switch control, refer to the instruction manual of

the corresponding type of graphics card.

2. Make sure the output port of the graphics card is more than 300M bandwidth output.
3. Please directly use the output port on the graphics card to connect with multi-screen treasure.
4. If the computer graphics card is connected to a multi-screen treasure device, check the graphics control panel to see if you see the name of the multi-screen treasure device.
5. It is best to install the latest version of the graphics card driver, download the latest driver for the graphics card from the official website, and uninstall the old driver before installing the latest driver.

4.4. Display problems

1. Show whether the device supports the output resolution. You can test the resolution by directly connecting the computer graphics card to the device.
2. Show whether the power supply of the device is stable and turn on the signal receiving function (power on, search signal function, etc.)
3. According to the transmission distance from the multi-screen treasure to the display device, select the

appropriate receiving end.

4. 4. If the connection distance is more than 1.5 meters, it is recommended to use network transfer.

5. Problem solving

Prerequisites	Problem phenomenon	Solution
Output resolution is correct	Image blue	Set the computer properties, set to "Tile" in the desktop properties
Integrated Graphics	No image output	Change the discrete graphics card, or contact a technician