

HD Quad Video Multiplexers

User manual

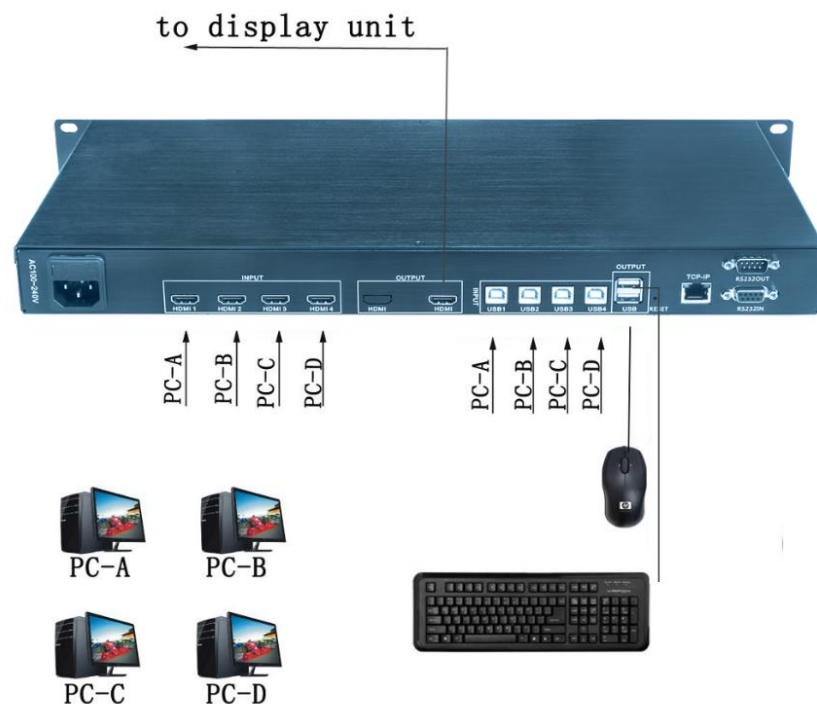
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Machine installation

1、Unpacking

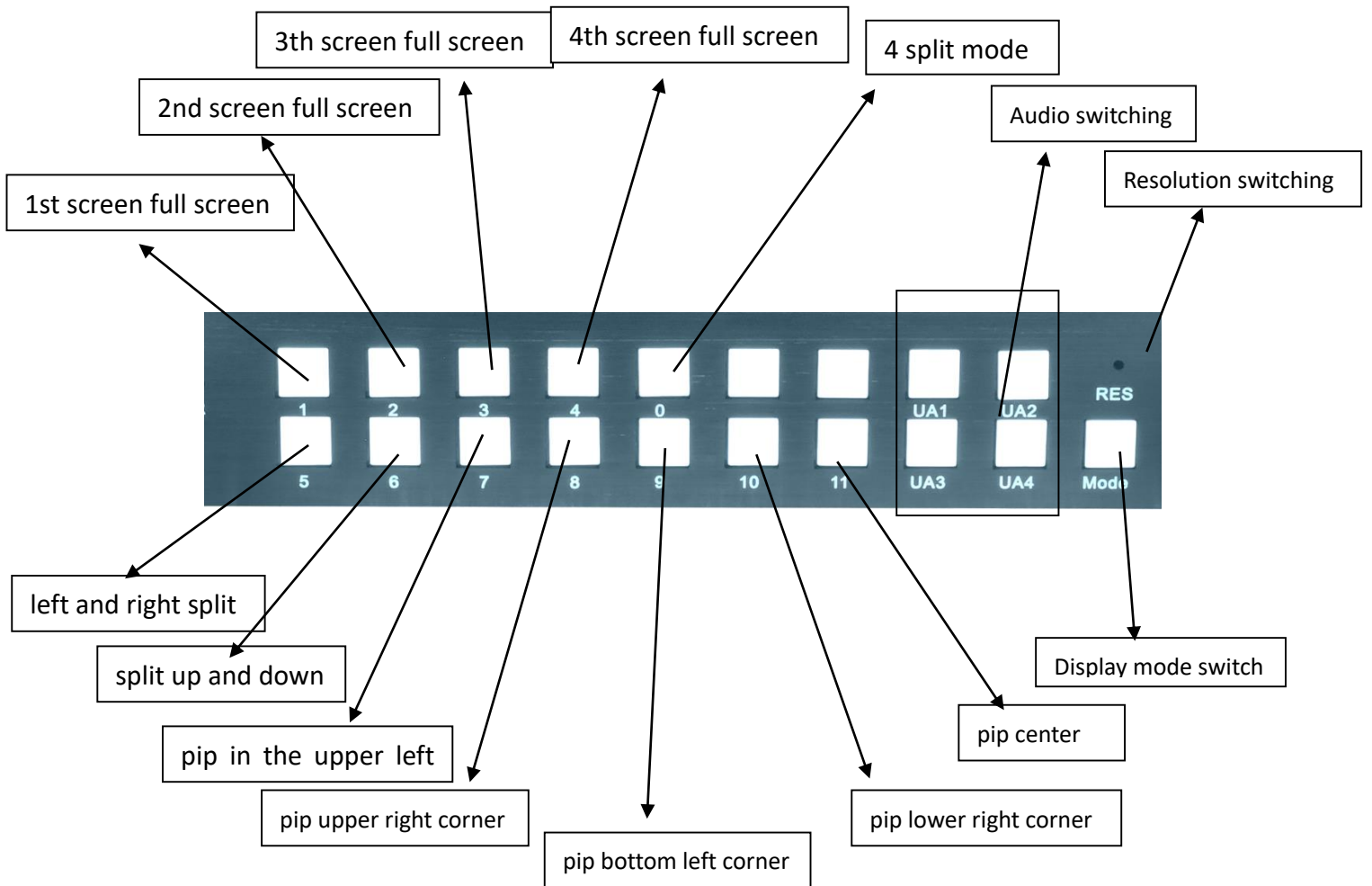
- Output connection: OUTPUT item HDMI is connected to the display unit via HDMI cable;
- Input connection:
 - Computer A is connected to HDMI1 via HDMI, and USB1 via USB cable;
 - Computer B is connected to HDMI2 via HDMI, and USB2 via USB cable;
 - Computer C is connected to HDMI3 via HDMI ,and USB3 via USB cable;
 - Computer D is connected to HDMI4 via HDMI, and USB4 via USB cable;
- External audio connection: If an external audio is needed, connect the audio to the audio port via an audio cable;
- The power adapter is connected to 220V, the indicator light is on, and the device starts to work normally;
- Note: If the KVM function is not needed, there is no need to connect the USB cable; to use the USB function, HDMI and USB must be one-to-one correspondence, such as the HDMI cable of computer A connected to HDMI1, the USB1 split must also be connected to computer A, no The KVM function cannot be used normally.
- The following is the connection diagram:



Split mode switching

The display mode of the screen splitter can be switched through the chassis keys, computer keyboard, infrared remote control. The following are the instructions for the three switching methods:

1. Switch through the chassis button

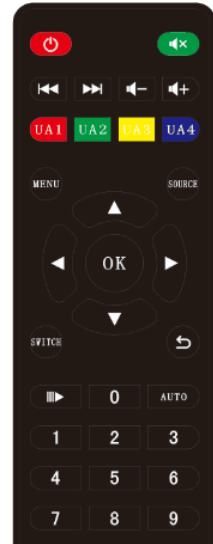


2. switch through the remote control

First, put the battery into the remote controller delivered randomly, Make the remote control work normally;

The following are the remote controller numeric keys for the corresponding display mode

- 1** key: 1st screen full screen
- 2** key: 2nd screen full screen
- 3** key: 3th screen full screen
- 4** key: 4th screen full screen
- 0** key: 4 split mode **5** key: left and right split
- 6** keys: split up and down
- 7** key: Picture-in-picture in the upper left corner
- 8** key: Picture-in-picture in the upper right corner
- 9** key: Picture-in-picture in the lower left corner
- SWITCH** key: Mode switch in turn



Switching through the computer keyboard will be introduced together in the next chapter KVM function.

KVM function operation

Through a set of computer mouse and keyboard, you can control the switching of the screen mode, and you can also edit the contents of the four computers. The operation mode is that long pressing the * key is not loose, and then pressing the corresponding function key can complete the operation of switching functions. For example, to switch to 4-split mode, you need to hold down the * key for a long time, and then press the 0 key to switch to 4-split mode. The following is an introduction to KVM operation:

1. Mouse traversal function

In the quad split mode, long press the * button + S button to switch to the mouse crossing mode, the mouse can traverse between 4 computer hosts. After the mouse traverses to any computer, you can control the computer and follow the switch with the keyboard.

2. The keyboard switching function

By adding the corresponding keys on the computer keyboard *, you can achieve

the screen mode and the keyboard and mouse following switching, as follows:

- * **+0** : 4 split screen display mode;
- * **+1** : the first screen full-screen display, USB mouse, keyboard Salvo to the first mainframe computer;
- * **+2** : the second screen full-screen display, USB mouse, keyboard Salvo to the second host computer;
- * **+3** : the third screen full screen display, USB mouse, keyboard Salvo to the third mainframe computer;
- * **+4** : the fourth screen full-screen display, USB mouse, keyboard Salvo to the fourth mainframe computer;
- * **+5**: left and right split mode;
- * **+6**: Up and down split mode;
- * **+7**:: Picture-in-picture in the upper left corner
- * **+8**:: Picture-in-picture in the upper right corner
- * **+9**:: Picture-in-picture in the lower left corner
- * **+F1** : Under quad display mode, the mouse, keyboard, switch to the first window;
- * **+F2** : Under quad display mode, the mouse, keyboard, switch to the second window;
- * **+F3** : Under quad display mode, the mouse, the keyboard switches to the third window;
- * **+F4** : Under quad display mode, the mouse, the keyboard to switch to the 4th windows;

- * **+A** : Four-mouse synchronization;
- * **+S**: Mouse through function;
- * **+F9** : Absolute coordinates;
- * **+F10**: Relative coordinates;
- * **+F11** : Software reset;

Audio settings

Audio switching



The audio switching function can be realized through the remote control and the computer keyboard, as follows:

1. Switch audio through computer keyboard: In quad mode,
press * + F1 audio to switch to the first window;
press * + F2 audio to switch to the second window;
Press * + F3 audio to switch to the third window;
Press * + F4 audio to switch to the fourth window;
2. 2. Set the audio through the remote control and the chassis keys: In the quad split mode,
press UA1 audio to switch to the first window;
Press UA2 Audio to switch to the second window;
Press UA3 Audio to switch to the third window;
Press UA4 audio to switch to the fourth window;
3. Press the AUTO button to cut through the 4 channels of audio;

Mute setting

Press  to switch to mute or unmute.

Volume adjustment

Press  to decrease the volume and press  to increase the volume. The volume adjustment is only for external audio (the embedded audio cannot be adjusted).

Non-deformation mode setting

In the conventional two-picture splitter, in the two-split display mode, the picture height is not changed but the width is changed, or the width is not changed and the height is changed, resulting in image compression and deformation. The product can lose part of the image through the remote control operation to ensure that the screen is not distorted. This function is widely used in the field of microscopes or medical treatment. The corresponding operation mode is as follows:

1. Left and right splitting without deformation

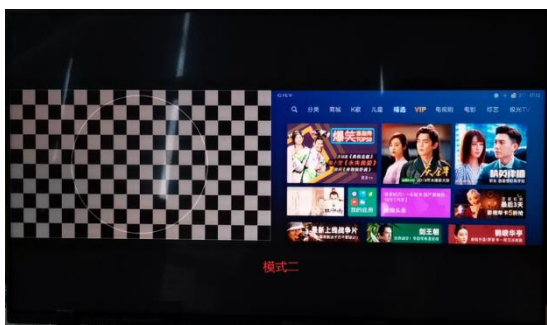
Switch to the left and right split display mode, press the key on the remote control to switch to the following screenshot modes:



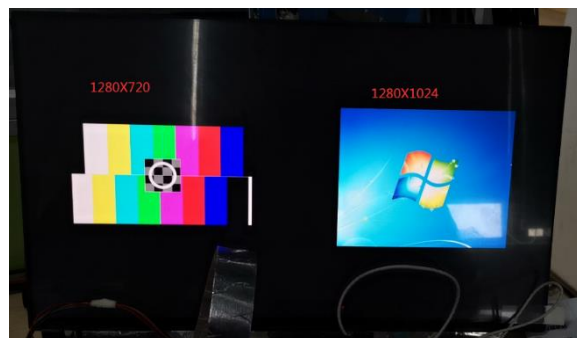
Normal mode



Screenshots are not deformed



Full screen stretch display



Point-to-point display

2. Up and down two split non-deformation display mode settings

Switch to the top and bottom split display mode, press the key on the remote control to switch the undistorted display mode, the same as the left and right setting mode.

Menu function

Signal source: Switch the input signal source of windows 1, 2, 3 and 4.

Example:

The input signal source of window 1 can be switched from HDMI1 to HDMI2, HDMI3, HDMI4.

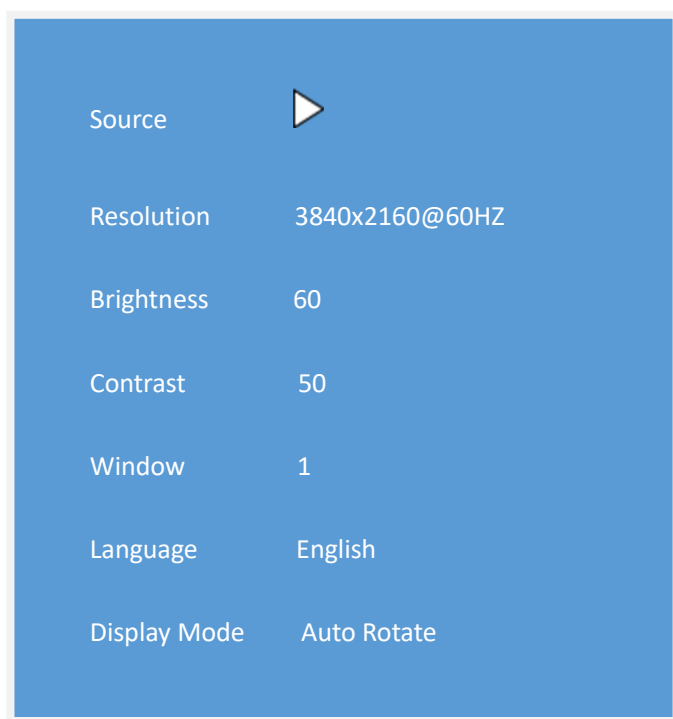
The input signal source of window 2 can be switched from HDMI2 to HDMI1, HDMI3, HDMI4.

Output resolution: You can use the left and right buttons to select different resolutions and press the menu key to confirm.

Brightness, contrast, window: Control the brightness and contrast of windows by selecting different windows

Language: You can choose to switch between Chinese, English and Traditional Chinese.

Display mode: You can choose to switch between screenshot mode, normal mode, full-screen non-deformation mode, and point-to-point mode.



Resolution setting

The product supports setting the output resolution, which can be set to 1280x720 @ 60HZ 、 1920x1080 @ 60HZ、2560X1440@60HZ 、 3840x2160@30HZ 、 3840x2160@60HZ. The resolution can be set via the pinhole button of the chassis and the remote control as follows:

1. Setting via remote control

Press the SOURCE button on the remote control to switch the above resolutions in turn. It takes five or six seconds to complete each switch of resolution, please do not press SOURCE in quick succession!

2. Button setting via hidden cabinet

Use a small-diameter tool to insert the pinhole (as shown below) on the resolution of the front panel of the chassis to switch the resolution alternately. It takes five or six seconds to switch the resolution each time.



common problem

Q: Why is there no image in the display unit when the device hardware is connected correctly?

A: It is possible that the output resolution of the device exceeds the physical resolution of the display unit, and the overclocking leads to no display. Please switch the resolution through the remote control or the chassis button.

Q: Why can't the KVM function be used normally?

A: There may not be a one-to-one correspondence between the USB cable and the HDMI cable, which causes the KVM and the screen to switch to the same channel asynchronously. Please check whether the wiring is correct according to the instructions in the operation manual.

Q: Why is the wiring correct, but the mouse and keyboard cannot be used?

A: Please press * + F11 to reset the KVM module

Control code

RS-232 receiving code, you can switch the display mode of the screen splitter by sending RS-232 code, the specific code operation is as follows:

1. Baud rate: 9600, data bit: 8, stop bit: 1, parity: NONE

For example, send: 05 30 43 67 0a the first screen full screen

Received codes 0x05, 0x30, 0x43, 0x67, 0x0a, the first screen is displayed in full screen;

Received code 0x05,0x31,0x38,0x67,0x0a the second screen full screen display;

Received codes 0x05, 0x35, 0x45, 0x67, 0x0a full screen display on the third screen;

Received codes 0x05, 0x30, 0x38, 0x67, 0x0a The fourth screen is displayed in full screen;

Received codes 0x05, 0x33, 0x30, 0x67, 0x0a standard 4-split display mode;

Receive the code 0x05, 0x33, 0x35, 0x67, 0x0a and display it in two divisions;

Receive the code 0x05, 0x33, 0x36, 0x67, 0x0a and split it up and down;

Received codes 0x05, 0x33, 0x37, 0x67, 0x0a picture-in-picture upper left corner;

Received codes 0x05, 0x33, 0x38, 0x67, 0x0a picture-in-picture upper right corner;

Received codes 0x05, 0x33, 0x39, 0x67, 0x0a PIP lower left corner;

Received codes: 0x05, 0x33, 0x40, 0x67, 0x0a lower right corner of PIP;

Received codes: 0x05, 0x33, 0x41, 0x67, 0x0a center in picture-in-picture;

Received codes 0x05, 0x34, 0x32, 0x67, 0x0a Picture mode round robin;

Received code 0x05, 0x35, 0x31, 0x67, 0x0a audio to switch to the first window;

Received code 0x05, 0x32, 0x32, 0x67, 0x0a audio to switch to the second window;

Received code 0x05, 0x32, 0x33, 0x67, 0x0a audio to switch to the third window;

Received codes 0x05, 0x32, 0x34, 0x67, 0x0a audio to switch to the fourth window;

Received codes 0x05, 0x36, 0x38, 0x67, 0x0a The first picture channel becomes HDMI1;

Received codes 0x05, 0x36, 0x39, 0x67, 0x0a The first picture channel becomes HDMI2;

Received codes 0x05, 0x36, 0x40, 0x67, 0x0a The first picture channel becomes HDMI3;

Received codes 0x05, 0x36, 0x41,0x67, 0x0a The first picture channel becomes HDMI4;

Received codes 0x05, 0x36, 0x42, 0x67, 0x0a The second picture channel becomes HDMI1;

Received codes 0x05, 0x36, 0x43, 0x67, 0x0a The second picture channel becomes HDMI2;

Received codes 0x05, 0x36, 0x44, 0x67, 0x0a The second picture channel becomes HDMI3;

Received codes 0x05, 0x36, 0x45, 0x67, 0x0a The second picture channel becomes HDMI4;

Received codes 0x05, 0x36, 0x46, 0x67, 0x0a The third picture channel becomes HDMI1;

Received codes 0x05, 0x36, 0x47, 0x67, 0x0a The third picture channel becomes HDMI2;

Received codes 0x05, 0x36, 0x48, 0x67, 0x0a The third picture channel becomes HDMI3;

Received codes 0x05, 0x36, 0x49, 0x67, 0x0a The third picture channel becomes HDMI4;

Received codes 0x05, 0x36, 0x50, 0x67, 0x0a The fourth picture channel becomes HDMI1;

Received codes 0x05, 0x36, 0x51,0x67, 0x0a The fourth picture channel becomes HDMI2;

Received codes 0x05, 0x36, 0x52, 0x67, 0x0a The fourth picture channel becomes HDMI3;

Received codes 0x05, 0x36, 0x53, 0x67, 0x0a The fourth picture channel becomes HDMI4;

Resolution:

3840*2160@60Hz: 0x05, 0x32, 0x39, 0x67, 0x0a

3840*2160@30Hz: 0x05, 0x32, 0x38, 0x67, 0x0a

2560*1440@60Hz: 0x05, 0x32, 0x37, 0x67, 0x0a
1920*1080@60HZ: 0x05, 0x32, 0x36, 0x67, 0x0a
1280*720@60HZ: 0x05, 0x32, 0x35, 0x67, 0x0a
Undistorted display mode: 0x05, 0x36, 0x31, 0x67, 0x0a
Screenshot display mode: 0x05, 0x36, 0x32, 0x67, 0x0a
Full screen display mode: 0x05, 0x36, 0x33, 0x67, 0x0a
Point-to-point mode: 0x05, 0x36, 0x34, 0x67, 0x0a
Large volume: 0x05, 0x36, 0x35, 0x67, 0x0a
Low volume: 0x05, 0x36, 0x36, 0x67, 0x0a
Mute: 0x05, 0x36, 0x37, 0x67, 0x0a

Press the splitter button to send out the code

Press the splitter button 1 to issue the code 0x05,0x35,0x31,0x67,0x0a

Press the splitter button 2 to issue the code 0x05,0x32,0x32,0x67,0x0a

Press the splitter button 3 to send out codes 0x05, 0x32, 0x33, 0x67, 0x0a

Press the splitter button 4 to send out codes 0x05, 0x32, 0x34, 0x67, 0x0a

Press the splitter button 0 to send out codes 0x05, 0x33, 0x31, 0x67, 0x0a