HD 4K Video Multiplexers

1 Product Overview

The device is a high-performance UHD 4K quad video multiplexers. It supports four 4K signals to be displayed on the same 4K display unit at the same time. At the same time support KVM keyboard mouse switching, audio switching and other functions, you can switch between picture mode and audio through keyboard hotkeys.

The product supports 4 HDMI 1.4 inputs with a maximum input resolution of 3840x2160 @ 60HZ, which is backward compatible; 1 HDMI 2.0 output with a maximum output resolution of 3840x2160 @ 60HZ. Supports 4 USB inputs to connect the computer and 2 USB outputs to connect the mouse and keyboard.

The UHD video multiplexers is use a relatively large number in standard products currently on the market ,products are mainly used in video conferencing, teaching, exhibitions ect ,where need to use single display unit simultaneously display multiple UHD signals workplace.

2 Main Function

- Four-screen split function, displaying 4 screens on a single screen at the same time;
- 4 channels of HDMI1.4 signal input, input resolution up to 3840 * 2160
 © 30HZ, backward compatible;;
- ↓ 1 HDMI 2.0 output, the highest output resolution is 3840x2160 @ 60HZ, and the output resolution can be switched to 1920x1080 @ 60HZ, 2560x1440 @ 60HZ, 3840x2160 @ 30HZ, 1280x720 @ 60HZ;
- ♣ Support KVM switch function, switch screen display mode, audio switch, quad split mouse through function by keyboard hotkey;
- ♣ Support image fixed position 、PIP、 POP function
- ↓ It also supports chassis keys, infrared remote control, and keyboard
 hotkey control functions;

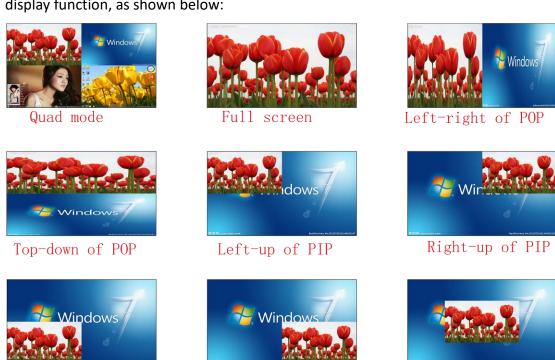
- Supports multiple modes such as non-deformation display, point-to-point display, etc.
- The standard 19-inch 1U chassis can be directly mounted on the standard cabinet;

3 Detailed Introduction

3.1, Screen division function

Left-down of PIP

Support 4 signals displayed on the same display unit at the same time, and realize a certain signal switch to full screen display, two screen split display, fixed mode PIP display function, as shown below:



3.2, Supports 3840 * 2160 HD input and output signals

The UHD video multiplexers supports 4 HDMI input signal , HD video supports interlaced and progressive input. Products up to ultra high resolution of 3840 * 2160 @ 60HZ signal input, and downward compatible; all input signals through professional-level image processing chip, HDMI signal of 60HZ unified progressive output, the maximum output resolution support 3840X2160 @ 60HZ, At the same time the user can choose other resolutions according to the needs , such as 1920 *

Right-down of PIP

Center of PIP

3.3, KVM switch function

Only a set of mouse and keyboard can be used to control the splitter for almost full functions, such as the keyboard hotkey combination to switch a certain signal to single-screen display, quarter-screen display, separate audio switching, and mouse-through function in quad-screen mode. The function of this product will be widely used in various video conference systems and other places. Users will be more convenient, more efficient, save display equipment and save more operating space when using this product.

3.4, Mouse through function

The UHD video multiplexers is the only video multiplexers on the market with a mouse-through function. This function enables the mouse to freely move between 4 windows in the 4-segment mode, and the keyboard simultaneously follows. This function will Widely used in medical, teaching, stock and other places that need to operate multiple windows in real time.

3.5, Two-division non-deformation display and point-to-point display

In the conventional two-picture splitter, in the two-split display mode, the width of the picture does not change but the width changes, or the width does not change but the height changes, resulting in image compression and deformation. However, The device can make the screen lose part of the image and ensure that the screen is not distorted. This function is widely used in microscopes or medical fields.

3.6, Audio and video switching functions

The 4K Quad video multiplexers except can display video signals, but also supports audio and image synchronization switch or under quad mode select a picture corresponding audio play, which to fill the gaps that pre HD video multiplexers can not be achieved audio capabilities.

3.7, Control method

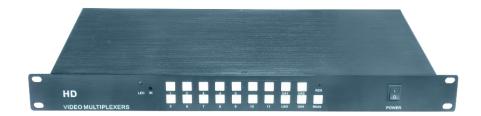
Support keyboard hot key, infrared remote control, and chassis key functions.



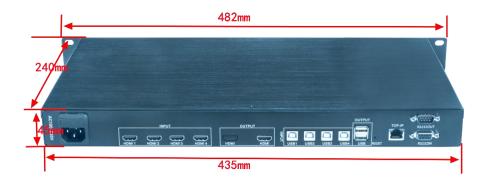
5 System topology



Product Picture and size







7 UHD video multiplexers technique datd

name	specification
Signal input	
Input port	4HDMI、4USB
Resolution	HDMI support highest resolution of 3840*2160@30HZ and downward
	compatibility
Color depth	24bit,1677 ten thousand
PIP、POP mode	Fixed model
output	
interface	1 HDMI connect display device and support video、 audio sync output;
	2 USB 2.0,one connect mouse the other connect keyboard
Resolution	Canchoose3840*2160/60HZ, 3840*2160@30HZ, 2560*1440@30HZ ,
	1920*1080@60HZ, 1280*720@60HZ
Color depth	24bit,1677 ten thousand
Control mode	Keyboard hot keys, chassis keys, infrared remote control;
voltage	Input voltage: 90~260V AC voltage
dimension	435mm(L)*45mm(H)*240mm(W)
Weight	1.45KG
Power	No more than 15w