4K video wall controller
With seamless switcher

Ⅰ Product introduction

The product is a multifunctional 4K matrix-splicing integrated processor. Its main function is to realize the free switching between conventional 4K splicing and matrix, achieving the effect of one machine and dual-use. It is a 4-way 4K splicing device. , It is a matrix switcher with 4 inputs and 4 outputs. The product supports 4 HDMI signal inputs, 1 DP signal input (splicing), and supports up to 4 HDMI signal outputs.

In splicing mode, it supports 1x2, 2x1, 2x2, 1x3, 3x1, 1x4, 4x1 splicing, and supports free switching of 5 4K input signals. All input signals can be switched to the large screen for splicing display, and audio and video are output synchronously.

In matrix mode, it supports arbitrary switching of input and output, and supports seamless switching of HDMI signals to realize fast switching without black screen. The matrix also supports 4-screen preview function, which displays 4 HDMI inputs on one display at the same time.

The product supports ordinary case and 1U case. 1U case has TCP/IP control function, other functions are the same, and the cost is slightly higher than ordinary case.

With superior functions, the product is suitable for various video surveillance projects, splicing projects, exhibition halls, control centers, etc.

Ⅱ Main functions

✓ A machine includes splicing and seamless switching functions at the same time, and functions can be selected freely.

✓ Matrix mode supports seamless switching, two-key quick switching function.

✓ Support 1x2, 1x3, 1x4, 2x1, 3x1, 4x1,2x2 mode in splicing function

✓ Support any display unit signal rotation 180 degrees.

✓ Edge shielding function, splicing mode supports horizontal and vertical splicing adjustment;

✓ Matrix mode supports any output 4 screen split display;

✓ Support 1 DP1.2, 1 HDMI2.0, 3 HDMI1.4 inputs, the resolution up to 4K@60hz.

✓ 4 HDMI outputs, output resolution supports 1024*768@60HZ, 1280*800@60HZ, 1280*720@60HZ, 1920*1080@60HZ, 1920*1200@60HZ, switchable;

✓ Support remote control, RS232, chassis button control;

✓ Small chassis and 1U chassis are optional, 1U chassis has TCP/IP control function, other functions are the same, the cost is slightly higher for smaller chassis;

Ⅲ Detailed introductions

1、Input signals

Support 1 $DP_{1.2}$(4K@60hz) , 1 $HDMI_{2.0}$, 3 $HDMI_{1.4}$(4K@30hz) inputs

Support 4 $HDMI_{1.3}$ output , output resolution supports 1024*768@60HZ, 1280*800@60HZ, 1280*720@60HZ, 1920*1080@60HZ, 1920*1200@60HZ, switchable;
Support 1 3.5 mm audio output to connect the sound.

2、Splicing, matrix mode switching function

Users can choose splicing mode or seamless switching mode. DP input can only be used in splicing mode.

or

2、Seamless switching function

Support HDMI input signal 4x4 seamless switching function, and can also support any screen to display 4 input signals at the same time.

4、Splicing function

The product's splicing function is integrated design, a single machine can achieve 4 HDMI signal splicing output, and a single machine can set various splicing modes such as 1x2, 2x1, 2x2, 1x3, 3x1, 1x4, 4x1, etc.
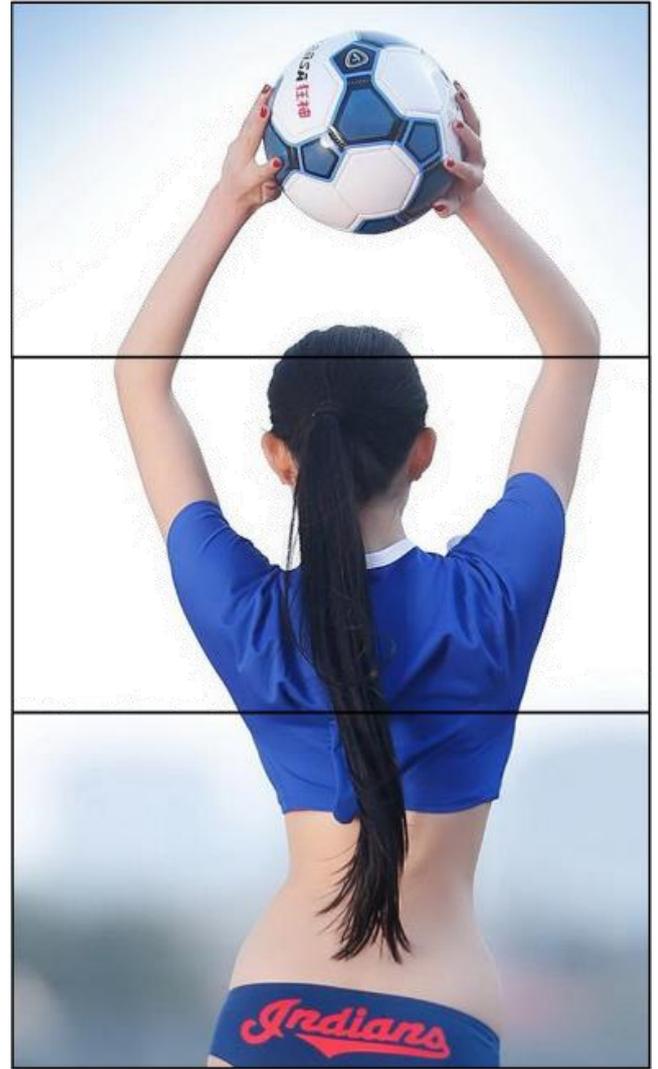
2x2 model

Portrait 1x3 modemodel

3x1 model

4.1 180 degrees rotation function
    Support to set any display unit to rotate 180 degrees.
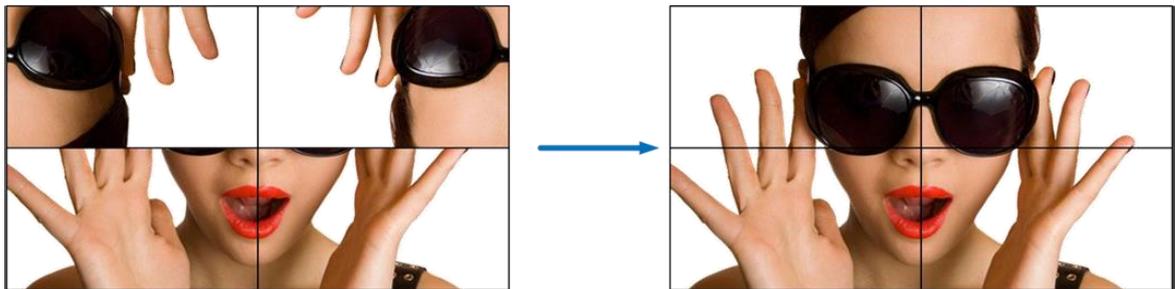
4.2 Edge shielding function
    After setting the edge seam processing, a part of the image is hidden, so as to achieve the effect of no deformation and no distortion.
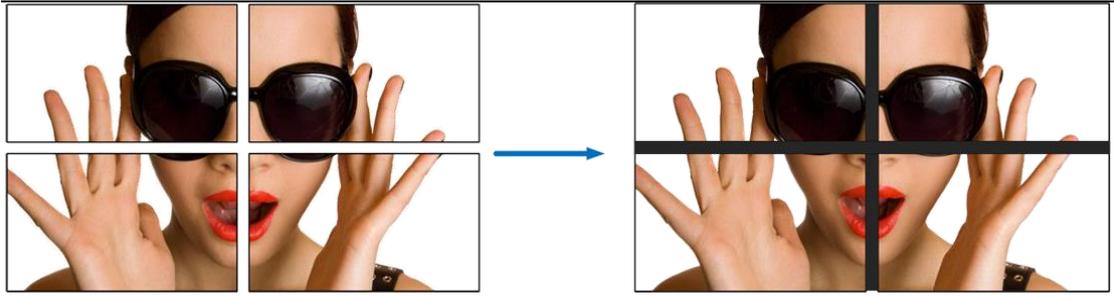
5、control method

The device can be controlled through the remote control, chassis buttons, RS-232, and central control.

Ⅳ　System topology
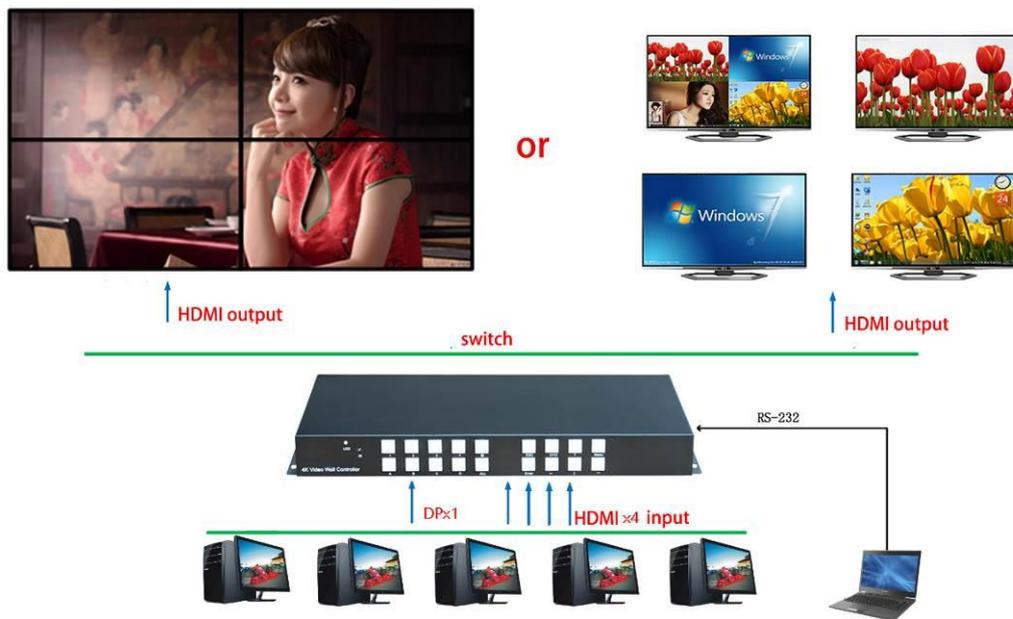
V Image and size

Front Panel: Small Chassis and 1U Chassis

Rear panel: small chassis and 1U chassis

315mm

160mm

36mm

INPUT

OUTPUT

DC 12V   HDMI1 HDMI2 HDMI3 HDMI4   DP   A-OUT   HDMI1   HDMI2   HDMI3   HDMI4   RS232

335mm

482mm

240mm

45mm

AC100-240V   TCP/IP   RS232   HDMI1 HDMI2 HDMI3 HDMI4   DP   A-OUT   HDMI1   HDMI2   HDMI3   HDMI4   RS232

INPUT

OUTPUT

435mm
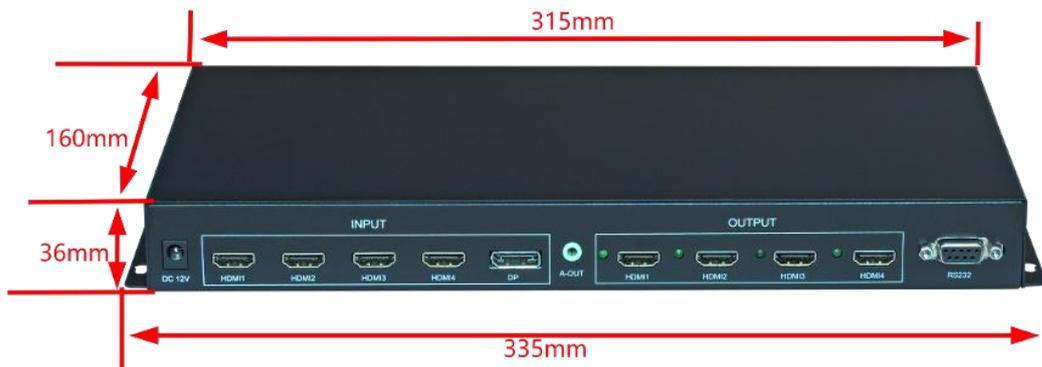
Ⅵ Technical parameter

Name	Specification
Input signal	
input interface	1 HDMI$_{2.0}$,3 HDMI$_{1.4}$,1 DP$_{1.2}$
Resolution	HDMI$_{2.0}$ andDP$_{1.2}$ supports 3840x2160@60HZ, HDMI 1.4 supports 3840x2160@30HZ
Output	
Output interface	4 HDMI$_{1.3}$ and one 3.5mm audio
Output resolution	1024*768@60HZ, 1280*800@60HZ, 1280*720@60HZ, 1920*1080@60HZ, 1920*1200@60HZ, The resolution can be switched;
Control method	remote control, chassis buttons, RS-232, and central control. TCP/IP（1U）;
Input voltage	DC12V；/AC 220V(1U)
Splicing model	1x2, 2x1, 2x2, 1x3, 3x1, 1x4, 4x1
itx	Machine size: 315mm (length) x 160mm (width) x 36mm (height) Weight: 1.20KG
	Packaging size: 400mm (length) x 250mm (width) x 95mm (height) Gross weight: 1.75KG
1U chassis	Machine size: 435mm (length) x 240mm (width) x 45mm (height) Weight: 2.3KG
	Packaging size: 545mm (length) x 330mm (width) x 120mm (height) Gross weight: 3.0KG
Power consumption	Up to 20W