



## TK- UHD04 video wall controller

### Product Introduction

TK-UHD04 video wall controller is a multifunctional four screen point-to-point processor that supports one DP1.4 input, one HDMI 2.0 input, and four HDMI outputs. The product can set multiple splicing modes and switch resolution synchronously to achieve point-to-point image display.

The product supports multiple input resolution point-to-point display modes, including 1x2, 2x1, 2x2, 1x3, 3x1, 1x4, 4x1, and up to 1x4 landscape display 7680x1080@60hz / 7680x1200@60hz 4x1 landscape screen 1920x4320@60hz / 1920x4800@60hz 1x3 landscape screen 5760x1080@60hz / 5760x1200@60hz 3x1 landscape screen 1920x3240@60hz / 1920x3600@60hz 2x2 landscape screen 3840x2160@60hz / 3840x2400@60hz...

### Main function

- Both HDMI and DP support 1x4 (7680x1080@60hz)、4x1 (1920x4320@60hz)、1x3 (5760x1080@60hz)、3x1 (1920x3240@60hz)、2x2 (3840x2160@60hz) Point-to-point splicing, while also being backward compatible;
- Supports 1x2, 1x3, 2x1, 3x1, 2x2, 1x4, and 4x1 point-to-point splicing modes;
- 1 DP1.4 input and 1 HDMI2.0 input, with downward compatibility;
- Supports 1080P and 1200P output resolution options, compatible with LCD screens and resolution projection;
- Support automatic recognition of matching resolutions based on splicing patterns;
- Combined with multi head graphics cards, ultra-high resolution splicing walls can be formed, such as whole walls 11520x3240@60HZ Etc;
- Support 180 degree flipping and edge blocking of any image;
- Supports infrared remote control, chassis buttons, and RS-232 control;

## Detailed introduction

### 1、Input signal and resolution

Supports 1 HDMI 2.0 signal and 1 DP1.4 input, with HDMI signal support up to 7680x1080@60hz Input. According to different stitching modes, DP input can choose from multiple different resolutions to achieve point-to-point stitching.

Manual switching between two input signals.

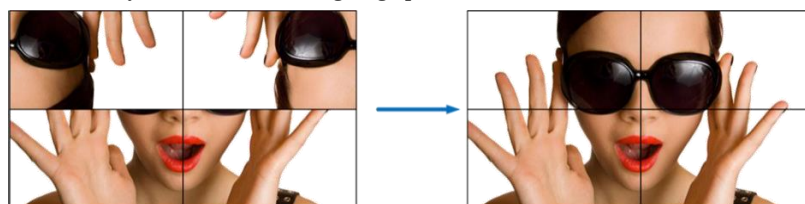
mode \ Input	DP	HDMI
1x2	3840x1080@60hz	3840x1080@60hz
2x1	1920x2160@60hz	1920x2160@60hz
1x3	5760x1080@60hz	5760x1080@60hz
3x1	1920x3240@60hz	1920x3240@60hz
2x2	3840x2160@60hz	3840x2160@60hz
1x4	7680x1080@60hz	7680x1080@60hz
4x1	1920x4320@60hz	1920x4320@60hz

### 2、Output Resolution

Supports two optional output resolutions to achieve better compatibility with different display terminals, such as LCD screens, projectors, etc. The machine includes options for output resolution of 1920x1080 and 1920x1200.

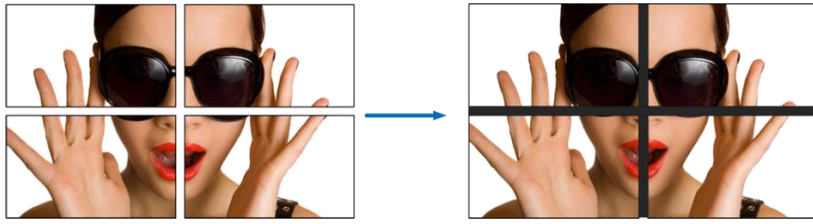
### 3、Image 180 degree rotation function

Compared to regular splicing products, the ultra high resolution splicer has a 180 degree mirror flip function for each individual display unit. When using a regular LCD TV splicing, users flip the previous row of LCD TVs 180 degrees, greatly reducing the LCD splicing gap and reducing image distortion caused by excessive edge gaps.



### 4、Edge shielding function

All splicing display units have certain physical border gaps. Without edge shielding function processing, the image will visually pull apart, which feels very unnatural; The image that has undergone edge shielding processing has no deformation or stretching, making it more natural and realistic visually. Compare the images before and after edge masking processing as shown in the following figure:



## 5. Image mapping function

The product can change the software address for each output through a remote control. Users can also set the remote control to display the correct area image for each display unit when the wiring sequence is incorrect during project installation, reducing the inconvenience caused by rewiring.

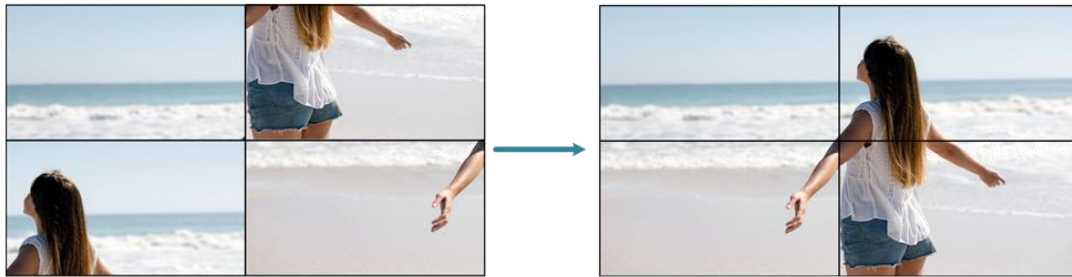
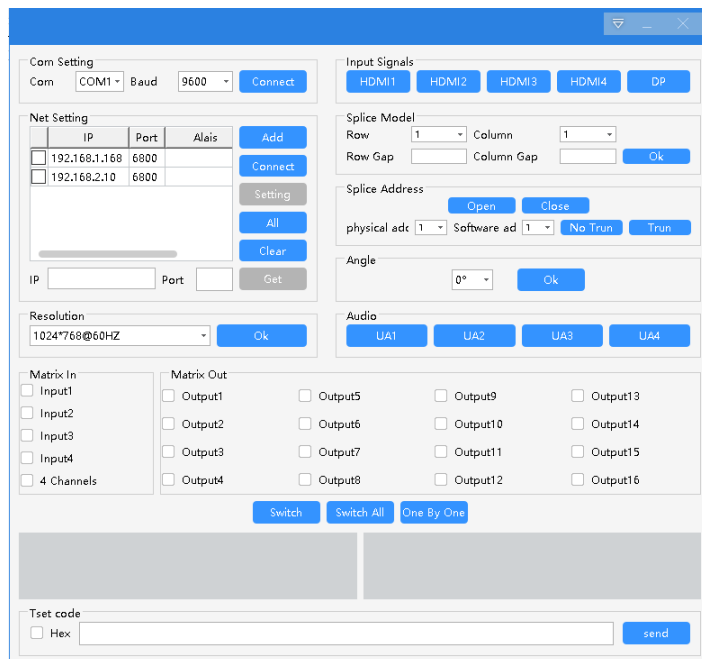
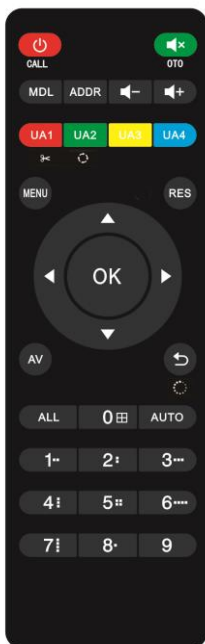


Image distortion after wiring

After setting up

## 6、Infrared remote control, chassis buttons, serial port control

The product can control the machine through remote control settings, chassis, serial port connection to upper computer software, and other methods.



## 6、Automatic recognition of EDID

The product automatically outputs the corresponding edid based on the splicing mode, switches between different splicing modes, and the computer will automatically recognize and switch to the corresponding edid.

## Application

1、Landscape 1x4 mode, total resolution 7680x1080@60HZ 4x1 mode 1920x4320@60HZ .



2、1x3, 3X1 modes. Total resolution 7560x1080@60HZ 、 1920x3240@60HZ .



3, Two screen 2x1 mode, total resolution 1920x2160@60HZ Or other matching resolutions



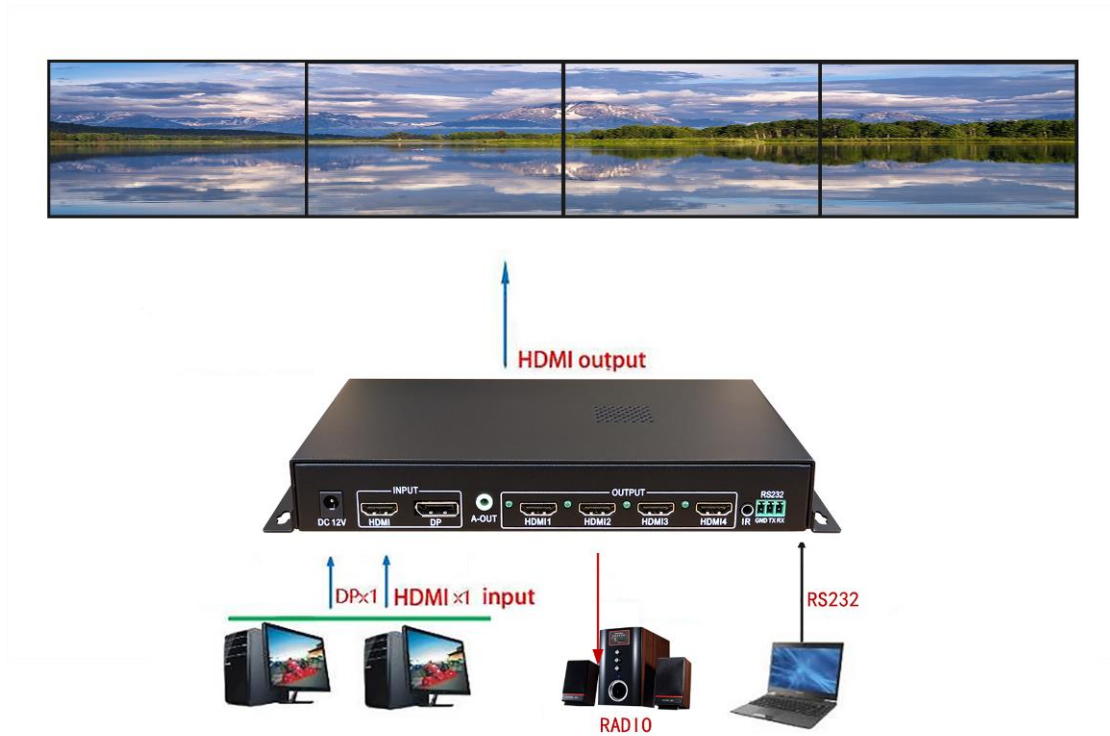
4, Vertical screen 1x3 mode, total resolution 3240x1920@60HZ



5, Vertical 3x1 mode, total resolution 1080x5760@60HZ



System topology diagram



Product images





## Product parameters

name	specifications
INPUT	
input	1 HDMI2.0 input and 1 DP1.4 input
DP input resolution	7680x1080@60hz 1920x4320@60hz 3840x2160@60hz Can be backward compatible and customize resolution;
HDMI input resolution	7680x1080@60hz 1920x4320@60hz 3840x2160@60hz Can be backward compatible and customize resolution;
output	
output interface	4 HDMI ports for output, supporting audio and video synchronization output; 1 3.5mm audio left and right channel stereo, used for connecting stereo speakers;
Output Resolution	1920*1080@60HZ, 1920*1200@60HZ, Resolution switchable;
control mode	Chassis buttons, remote control, RS232;
Input Voltage	Small chassis DC12V;
Chassis size, weight, power	
power	4 channels:<8W
Small case	Machine size: 213mm (length) x 135mm (width) x 31mm (height), weight: 0.65KG
	Packaging size: