TK-M Series 4K VIDEO WALL CONTROLLER

Not just a 4K60 video wall controller

but also an Ultra-high-resolution Processor

Used for 4K video wall controller

1. Supports various signal source inputs, including computer, Blu-ray, PS2, Android, etc.
2. Supports HDCP 2.2 protocol.
3. True 4K@60Hz input, RGB format.
4. Image 180-degree rotation, edge masking, signal switching, and more.
5. Supports up to 16-screen splicing in any mode within 16 screens (except for 1x16 and 16x1).

Used for ultra-high-resolution video wall controller

1. Ultra-high-resolution input, supporting a maximum of 5760x3240@30Hz input, with various point-to-point modes for 60Hz display.
2. Customizable ultra-high-resolution scaling display.
3. Supports any splicing mode within 16 screens (except for 1x16 and 16x1).

Ⅰ. Key Features

- Supports 1 $DP_{1.2}$ input and 1 $HDMI_{2.0}$ input.
- Customizable splicing modes within 16 screens, (except for 1x16 and 16x1).
- Modular design, allowing for customization of various splicing scales.
- Single DP input supports ultra-high resolutions such as 5760x3240@30Hz and 5760x1080@60Hz.
- Customizable resolution functionality for distortion-free, non-stretched ultra-high-resolution displays.
- Multiple output resolution options, compatible with LCD screens and various projector resolutions.
- Supports full point-to-point, lossless display for modes like 1x2, 1x3, 2x1, 2x3, 3x1, 3x2, and 3x3; other modes are displayed with proportional scaling.
- Supports large-scale video walls with point-to-point display when used in multiple units.
- Allows for 180-degree image rotation and edge masking on any input.
- Supports infrared remote control, chassis buttons, and RS-232 control.

Ⅱ.Splicing Modes

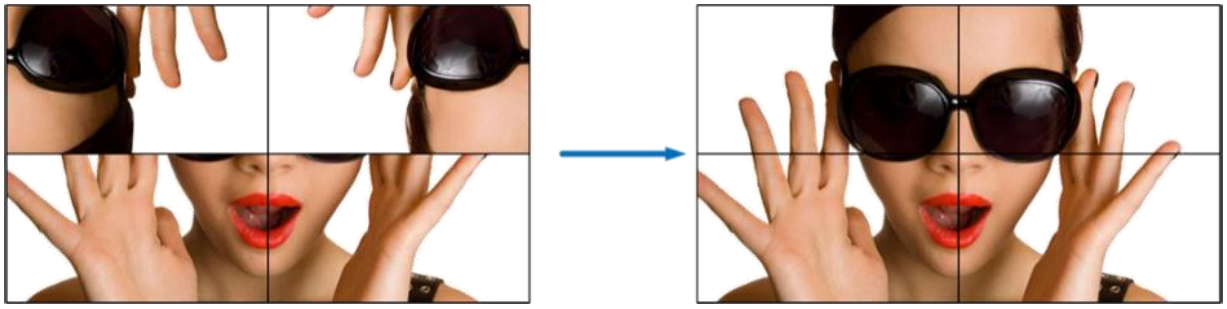
Allows free customization of splicing modes for 2 to 16 display units, (except for 1x16 and 16x1).

Ⅲ. Output Resolutions

Supports multiple output resolution options to ensure better compatibility with different display terminals, such as LCD screens and projectors with varying resolutions. Available output resolutions include 1024x768, 1280x720, 1280x800, 1600x900, 1920x1080, and 1920x1200.

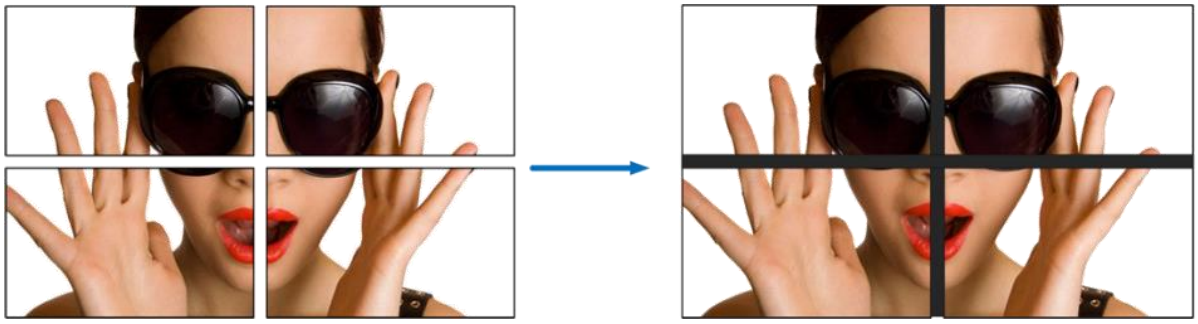
Ⅳ.180-Degree Image Rotation

Unlike standard splicing products, the TK-M series splicer provides a 180-degree mirror flip function for each individual display unit. When using LCD screens for splicing, users can flip the top row of displays by 180 degrees, effectively reducing the gap between screens and minimizing image distortion caused by large seams.



Ⅴ. Edge Masking Function

Each spliced display unit has a physical border gap, and without edge masking, the image may appear visually stretched or misaligned, creating an unnatural effect. With edge masking applied, the image remains undistorted and un-stretched, resulting in a more natural and realistic visual experience. Below is a comparison of the image before and after edge masking:



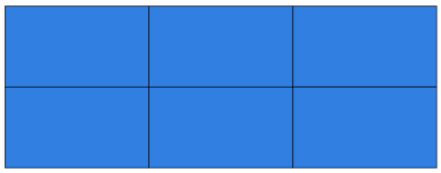
Ⅵ. Different Input Formats and Supported Resolutions

DP signal point-to-point supports the following resolutions:
All splicing modes support 3840x2160@60Hz and simultaneously support point-to-point resolution input in the following modes. Other **splicing modes allow customizable proportional resolution input.**

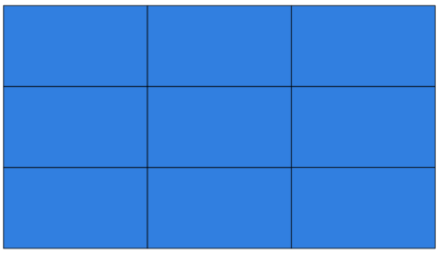
3840x1080/1200@60HZ

5760x1080/1200@60HZ

3840x1080/1200@60HZ



5760x2160@30HZ



5760x3240@30HZ

1920x2160@60HZ

1920x3240@60HZ

2160x1920@60HZ

3240x1920@60HZ

DP Supports Scalable Resolutions

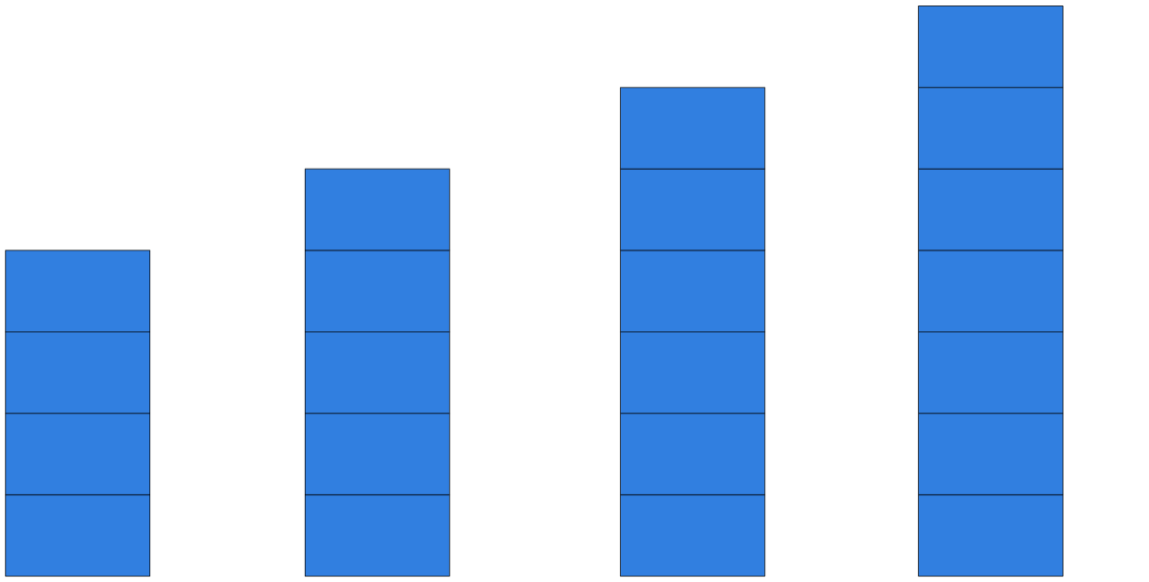
DP supports proportional resolutions (scaling requires custom resolution settings through the graphics card).

1x4：5440x756@60hz

1x5：5040x567@60hz

1x6：4896x459@60hz

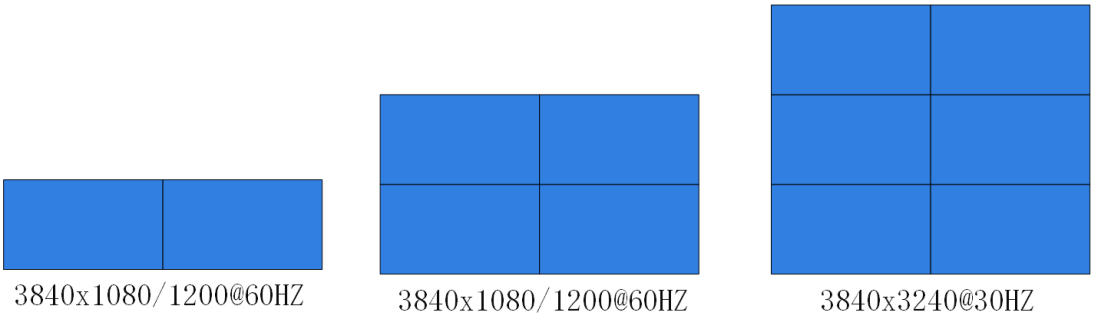
1x7：4704x378@60hz



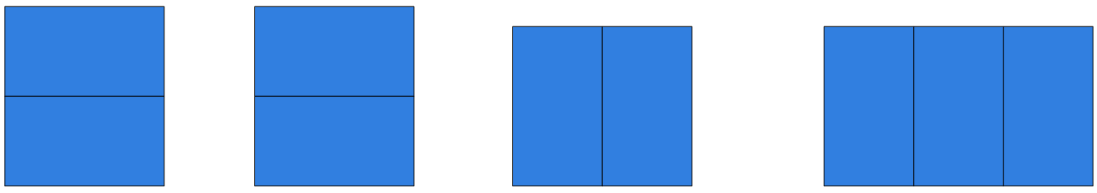
4x1：1760x3960@60hz　5x1：1408x3960@60hz　6x1：1408x3960@60hz　7x1：1008x3969@60hz

HD Signal Supported Resolutions

All splicing modes support 3840x2160@60Hz and simultaneously support point-to-point resolution input in the following modes:



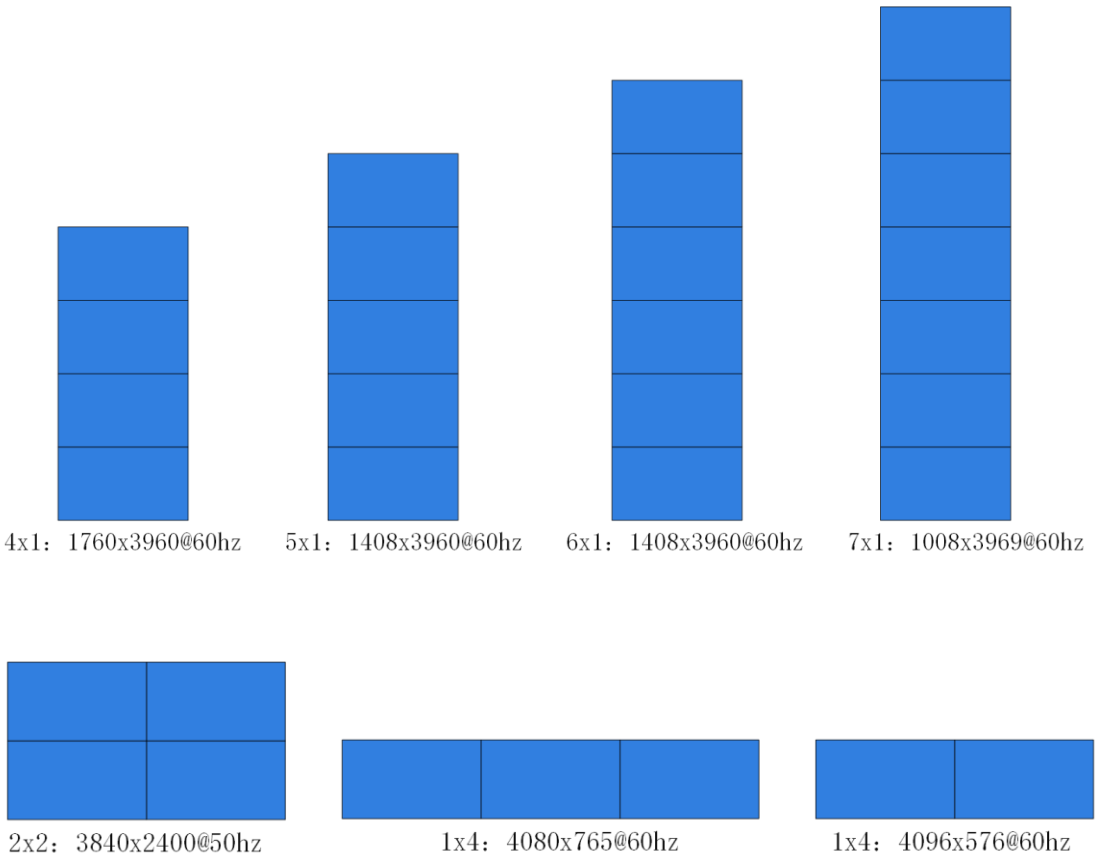
3840x1080/1200@60HZ　3840x1080/1200@60HZ　3840x3240@30HZ



1920x2160@60HZ　1920x3240@60HZ　2160x1920@60HZ　3240x1920@60HZ

HDMI Supports Scalable Resolution Input

HDMI supports proportional resolution input (scaling requires custom resolution settings through the graphics card).



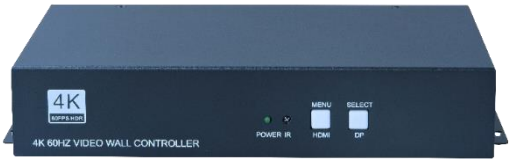
Ⅶ. Infrared Remote Control, Chassis Buttons, and Serial Port Control

The product can be controlled through the remote control, chassis buttons, or serial port connection to software on a host computer.

Ⅷ. Cascading for Ultra-High-Resolution Splicing

By combining multiple TK-M series splicers with multiple computers and multi-output graphics cards, an ultra-high-resolution video wall can be created. For example, using two TK-M9 units, a display with an ultra-high resolution of 11520x3240 can be achieved.

Ⅸ. Photos of Different Chassis Specifications



Small Chassis: 2 to 6 Screens Splicing

Standard 1U Chassis: Customizable for 7 to 13 Screens Splicing

Standard 2U Chassis: Customizable for 14 to 16 Screens Splicing

X.Technical Specifications

NAME	SPECIFICATION
Signal Input	
Input Interfaces	1 HDMI 2.0 Input,1 DP 1.2 Input
DP Input Resolutions	3840x2160@60HZ、5760x3240@30HZ、1920x3240@60HZ ,And more, with backward compatibility and the option to customize resolutions
HDMI Input Resolutions	支持 3840x2160@60HZ、3840x3240@30HZ,1920x3240@60HZ, And more, with backward compatibility and the option to customize resolutions
Output	
Output Interfaces	2 to 16 HDMI outputs, supporting synchronized audio and video output,1 x 3.5mm audio output for left and right stereo channels, used for connecting stereo speakers.
Output Resolutions	1024*768@60HZ, 1280*800@60HZ, 1280*720@60HZ, 1920*1080@60HZ, 1600x900@60HZ,1920*1200@60HZ, Resolutions are switchable, allowing flexibility in display settings.
Color Depth	24-bit, 16.7 million colors
Control Methods	Chassis Buttons, Remote Control,RS-232 Serial Port
Input Voltage	Small Chassis: DC 12V 1U and 2U Chassis: AC 110-220V
Display Modes	Customizable splicing modes for up to 16 screens (excluding 1 x16 and 16x1 configurations).
Chassis Dimensions, Weight, and Power	
Small Chassis	Device size: 302mm(L)x152mm(W)x40mm(H), Weight: 1.3KG
	Packaging size: 400mm(L)x250mm(W)x95mm(H), Weight: 1.7KG
1U Chassis Dimensions	Device size: 440mm(L)x243mm(W)x45mm(H), Weight: 3.4KG
	Packaging size: 565mm (L) x350mm (W) x140 (H) Weight: 4.3KG
2U Chassis	Device size: 440mm(L)x310mm(W)x88mm(H), Weight: 5.5KG
	Packaging size: 565mm (L) x400mm (W) x180 (H) Weight: 7.3KG