Video Wall Controller Cost-effective Video And Image Processing Device
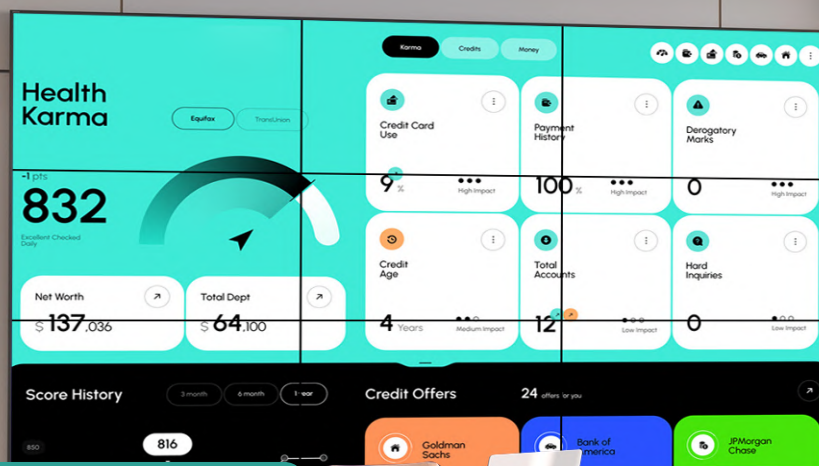
THC1U

\ INTRODUCTION

THC1U series multi-screen splicing processor is a newly launched ultra-high-definition video signal acquisition and transmission using an integrated design, a new architecture, and UI design. The video image resolution can reach the full 4:4:4 chromaticity in the RGB color gamut. Sampling multifunctional splicing processor.

It uses pure hardware FPGA + embedded architecture to provide customers with rich personalized function customization. THC1U series of scalable video wall processing systems is used for small and medium-sized video wall processing systems with up to 12 displays.

Supports multiple signal sources on the wall, splicing, roaming, cross-screen, zoom in and out, picture-in-picture, picture-out-of-picture, picture overlay and other display functions.

THC1U Series

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FEATURES

- FPGA+embedded architecture, the embedded system is stable and can support 7*24 hours of long-term operation. FPGA provides users with stable image processing capabilities.
- The device adopts an integrated design, is compact and thin, plug-and-play, upgradeable and maintainable. The aspect ratio complies with the golden ratio and has an external power supply.
- Support HDMI high-definition signal input; support HDMI high-definition digital signal output.
- Support any video signal on the wall for splicing, roaming, cross-screen, zoom in and out, picture-in-picture, outside-picture, picture overlay, etc.
- The maximum number of windows on a single screen is 9, and the entire screen layer supports 9*N layer overlay (N is the number of spliced screens). All window images are displayed in real time without losing frames, and the window operation is smooth, with no lag, no flickering, and no black screen.
- Supports single-port acquisition of 1920x1080@60HZ ultra-high-definition signals; supports single-port output of 1920x1080@60HZ ultra-high-definition signals.
- Support end-to-end low latency: input to output delay <40ms.
- Built-in FPGA audio de-embedding and switching function, which can separate and switch any HDMI audio channel to the 3.5mm audio output interface.
- The power consumption of the whole machine is as low as 30W, achieving green energy saving and environmental protection.
- The noise of the whole machine is <40dB; the noise of the 2U whole machine is <60dB.
- Supports Android tablet/mobile phone APP control.
- Supports WEB control, which can be used on computers/mobile phones/tablets to switch plan scenes through the WEB browser.
- Supports the saving of more than 1,000 planned scenarios.
- Multiple scenes can be preset in advance to easily switch between various scenes. Scene patrol is supported, and the patrol time interval can be customized.
- Scene switching delay is <30ms, seamless, no lag, no blue screen, and no flicker.
- Supports ultra-high-definition subtitle function. The font, color, size, background color, and background transparency of the subtitles can be flexibly selected, and the scrolling speed can be adjusted.
- Supports ultra-high-definition static basemaps, which are quick and easy to replace, making large-screen basemaps more colorful.
- Independent intellectual property rights adaptive de-interlacing, scaling, OSD technology, the picture is smooth and clear.
- Support LED.
- Support matrix grouping function.
- Supports signal source and display device validity detection and status LED light display.
- Device output port synchronization time difference = 0nS (excluding differences introduced by the screen);
- Support multi-user management.
- Supports online upgrade of the device through the upgrade tool.

PRODUCT STRUCTURE

Front Panel

THC1U0404

THC1U0408

THC1U0808

THC1U0412

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Custom Selection Display

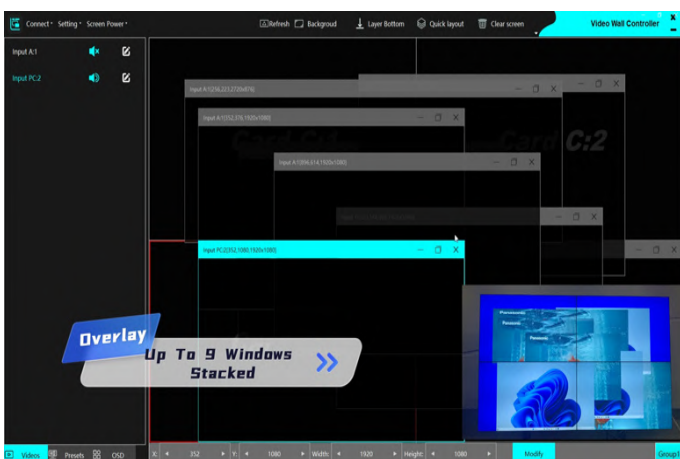Support LED, resolution can be customized through software

Audio Switch

Built-in FPGA audio de-embedding and switching function, which can separate and switch any HDMI audio channel to the 3.5mm audio output interface.

Android / iPAD Control

Support custom installation of Android software for control. iPAD WEB terminal switching planning scenario

Signal Source

The signal source is windowed and supports any video signal on the wall for splicing, roaming, cross-screen, zoom in and out, picture-in-picture, picture-outside picture, and picture overlay.

The maximum number of windows on a single screen is 9, and the entire screen layer is supported and 9*N layer overlay is supported (N is the number of spliced screens)

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DIAGRAM
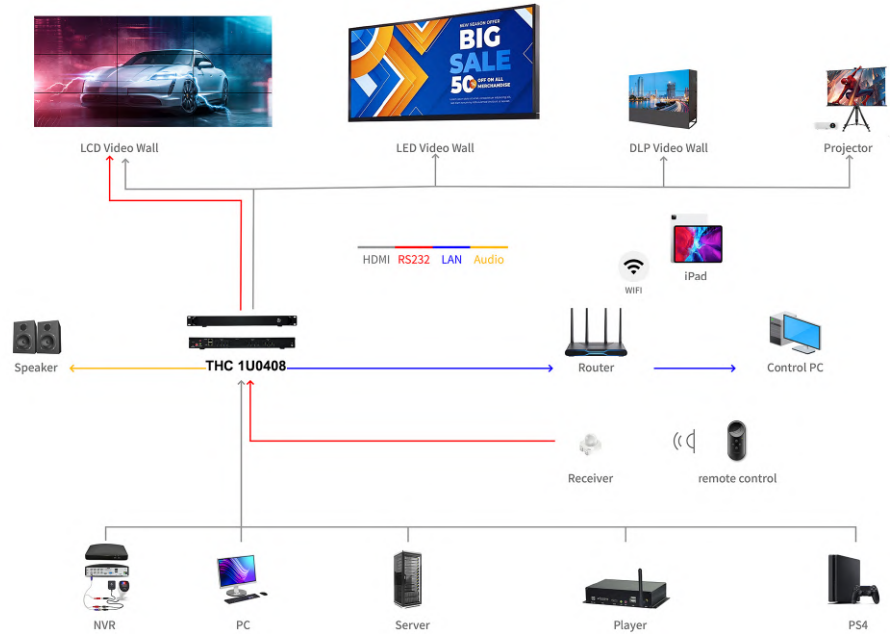
SPECIFICATIONS

THC1U Series				
Model	THC1U0404	THC1U0408	THC1U0808	THC1U0412
Input Port	4	4	8	4
Output Port	4	8	8	12
Max Windows / One Screen	9			
Size (MM)	440*280*44.45			
Weight	3KG			
Power Consumption	30W			
Input Hdmi Signal Card	HDMI1.4, Support 1920*1080P@60/50、1920*1080P@30/25、720P60/50、1024*768			
Output Hdmi Signal Card	HDMI1.4 , Support1920*1080P@60 ,Support Custom Resolution			
RJ45 Network Port	Quantity1,10/100M Adaptive, Supporting Other Devices In The LAN To Remotely Control The Processor			
RS232 Serial Port	Quantity1,Supports Access To The Large Screen And Central Control			
Audio Port	Quantity1,Support Whole-Machine Audio De-Embedding Output			
Infrared Remote Control Interface	Quantity1,Support Receiving Infrared Commands			
Power Supply	DC 12V/5A			
Operating Temperature	0℃~50℃			
Working Humidity	10% ~ 90% No Condensation			

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