THC-KS32 KYSTAR

Image processor control

Release date: 2025

Specification

1．Overview

Strong performance ensures fast and stable data transmission, meeting the requirements of LED screen complex enclosures

8-channel DP/HDMI input, support 3840x2160@60Hz or 7680x1080@60Hz display.

Independent HMDI high monitor output port. Support hardware decoding, output capability.

Must-have feature on multi-display processors is the ability to display multiple windows simultaneously on the screen and the ability to calibrate the presentation in a unified synchronization.

Professional Graphics Card, Built-in video transcoding tools, built-in stereo audio. Manage simulation-based screen presentation content layouts and presentation scheduling tasks.

Support network center control, remote mobile cloud system control.User-friendly control panel design, real-time monitoring of operating status. No need to use independent operation function.

Computer Control. Powerful and flexible control for large-size LED displays, specifically designed to meet the needs of events and applications that require high-quality image display over large areas.

Scalability: allows multiple devices to be connected together to form a multi-layer control system, meeting the needs of large-scale LED screen projects.

Supports any arrangement and combination of Gigabit network port outputs and loads are not limited by rectangles.

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Rear panel

Port specifications			
S/N	Type	Qty.	Specifications
1	Monitor out	2	HDMI 2.1×1, HDMI1.3, Maximum Support 4K@60Hz (Choose one of two)
2	PS/2	1	Connect mouse, keyboard
3	USB (input)	6	USB 2.0×4, USB 3.0×2 (Type-C×1)
4	RJ-45	1	1000M
5	Audio out		Audio output 3.1× 1 & 5.1× 1 2.0Vp-p/10 KΩ
6	DP1.4 output	5	Maximum support 3840×2400@60Hz or 4096×2160@60Hz

Hardware configuration (Standard configuration)	
Processor	Intel (intel) core multi-core high-frequency processor
Main-board	High-performance motherboard
RAM	DDR5 64G
SSD	500G M.2 High-speed solid state drive (scalable)
Graphics card	Quadro 5G Professional graphics card
Audio	Integrated 5.1 surround sound
Power supply	Server redundant power supply

Machine Specification	
Input power	100-240V AC~50/60Hz
Operating temperature	0-45℃
Size	572×482.6×177mm (LxWxH)
Neat weight	15KG
Power consumption	750W

2．Hardware Decoding Parameters

Supported hardware decoding parameters	
4k resolution	Format：H264、H265，Resolution limit：wide maximum 4096 ，height4096
8k resolution	Format：H265、Vp9，Resolution limit：wide maximum 8192，height 8192
Code format	AVC，HEVC，VP8，VP9，mpeg-1，mpeg-2
Package format	mp4、mov
Color space	YUV420 *Note:YUV444、YUV422、RGB do not support hardware decoding.

Color depth	8bit

3. Supported Media Formats

Media type	Format
Video	MP4、AVI、MKV、WMV、FLV、MOV、ASF、MPEG、MPG、TP、TS、MTS、M2TS、VOB、RMVB、RM、RAM、DIVX、EVO、OGM、M1V、M4V、MPE、3GP、WEBM、KRAWF、KTESTF
Picture	JPG、JPEG、GIF、BMP、PNG、TIF、TIFF、ICO
Audio	MP3、MP2、MPA、AAC、OGG、WAV、WMA、APE、AC3、FLAC、M1A、M2A、M4A、RA、DTS、DTSHD

4. Material Making Reference

	Frame	Type	Code	Image pixel	Graphics card	Remark
		JPG		YUV420 YUV444		Recommended width and height of 16K or less, ultra-long pictures, recommended discount production
		JPG		YUV420 YUV444		If the resolution exceeds 4K, it is recommended to use video
1080P	30FPS	MP4	H264	YUV420	P2000	Suggested bit rate is about 10M
	60FPS	MP4	H264	YUV420	P2000	Suggested bit rate is about 20M
4K	30FPS	MP4	H264	YUV420	P2000	Suggested bit rate is about 40M
	60FPS	MP4	H264	YUV420	P2000	Suggested bit rate is about 80M
		MOV	HAP		P2000	recommended to align the width and height to an integer multiple of 16.
8K	30FPS	MP4	H265	YUV420	RTX4000	Suggested bit rate is about 80M
	60FPS	MP4	H265	YUV420	RTX5000	Suggested bitrate is around 160M, frame rate will be lowered if screen complexity is too high.
	30FPS	MOV	HAP		RTX5000	HAP bitrate is non-variable,recommended that width and height are aligned to an integer multiple of 16.

*For materials over 8K, it is recommended to split them into multiple files.

Trademark Statement

 Registered trademark of Beijing Kystar Technology.

Statement