

KLS8

Eight ports 2 in 1 video controller

Version: v1.1

Release Date: October 2023



Specifications



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Professional Ultra HD Video Display
Control system integrated solution and service provider

Version record

version number	Change details	release time
V1.0	First edition released	2022.11
V1.1	Supports loading with a maximum width of 8192 and a maximum height of 4096	2023.10

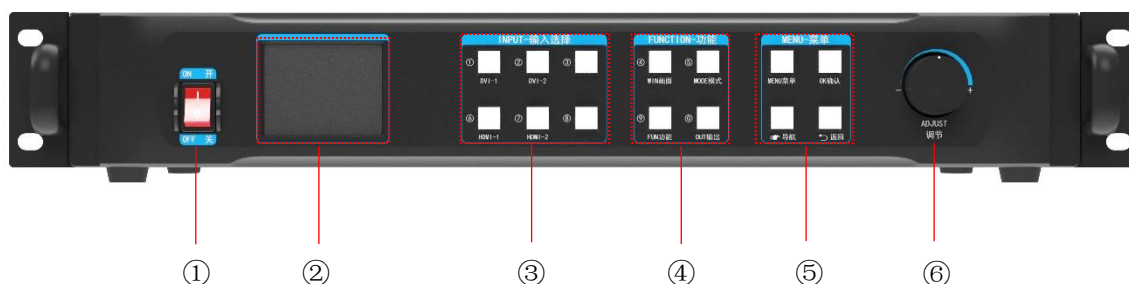
Summary

Kystar KLS8 two-in-one controller, supports 4-channel digital signal input, has 8 network ports output, the whole machine can load up to 5.2 million pixels, adopts pure hardware FPGA architecture, can run continuously for 365×24 hours, and meet the needs of small spacing Applies the configuration requirements for the large-screen control system.

Features

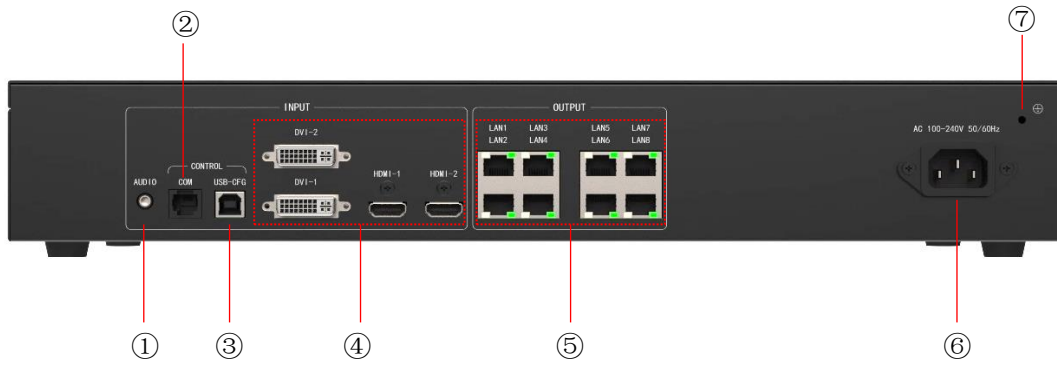
- Whole machine has 8 network ports, and the single network port can load 650,000 pixels. The maximum load of the whole machine is 5.2 million pixels. The width can reach 8,0192 pixels and the height can reach 4,096 pixels.
- It supports a variety of digital signal interfaces, 2-channel HDMI 1.3 and 2-channel DVI-D input source.
- Support 3 windows display, screen position arbitrary layout.
- Support signal source backup.
- EDID configuration management: support the reading, modification and customization of EDID (extended display identification data).
- Support one button black screen / static function.
- Black edge removal / clipping function: solve the problem of black edge generated by front-end signal, and cut arbitrarily for any signal source (still keep full screen state)
- Support key locking to prevent misoperation.
- It can adjust the brightness and contrast of the whole output screen in real time and quickly.
- K-HDR function, support SDR to HDR image optimization technology, can improve the contrast of ordinary SDR video, enhance image detail performance, and make ordinary video have HDR effect.

Panel description



Number	Name	Function description
①	ON/OFF	Power switch of equipment
②	LCD Screen	Display the device setting menu and the current status of the
③	Input Selection	<ul style="list-style-type: none"> ● ①DVI-1: Number key 1; Click to switch directly to DVI-1 signal ● ②DVI-2: Number key 2; Click to switch directly to DVI-2 signal ● ③Number key 3 ● ⑥HDMI-1: Number key 6; Click to switch directly to HDMI-1 signal ● ⑦HDMI-2: Number key 7; Click to switch directly to HDMI-2 signal ● ⑧Number key 8 <p>Input source status light: Normally on: the input signal connected is normal Flashing: no signal source is connected or the connected signal source is abnormal</p>
④	Function shortcut key	<ul style="list-style-type: none"> ● ④Screen: number key 4; Screen switching shortcut key ● ⑤Mode: number key 5; User mode shortcut key ● ⑨Function: number key 9; Shortcut keys for common functions ● ⑩OUT output: numeric key 0; Output black screen shortcut key
⑤	Menu	<ul style="list-style-type: none"> ● Menu: click to enter or return to the main menu interface ● OK: Confirm button ● Navigation: click to enter navigation debugging ● Return: click to exit the current interface
⑥	Adjust	<ul style="list-style-type: none"> ● Press the adjust to confirm the selection ● Turn the knob to select menu options or adjust parameters

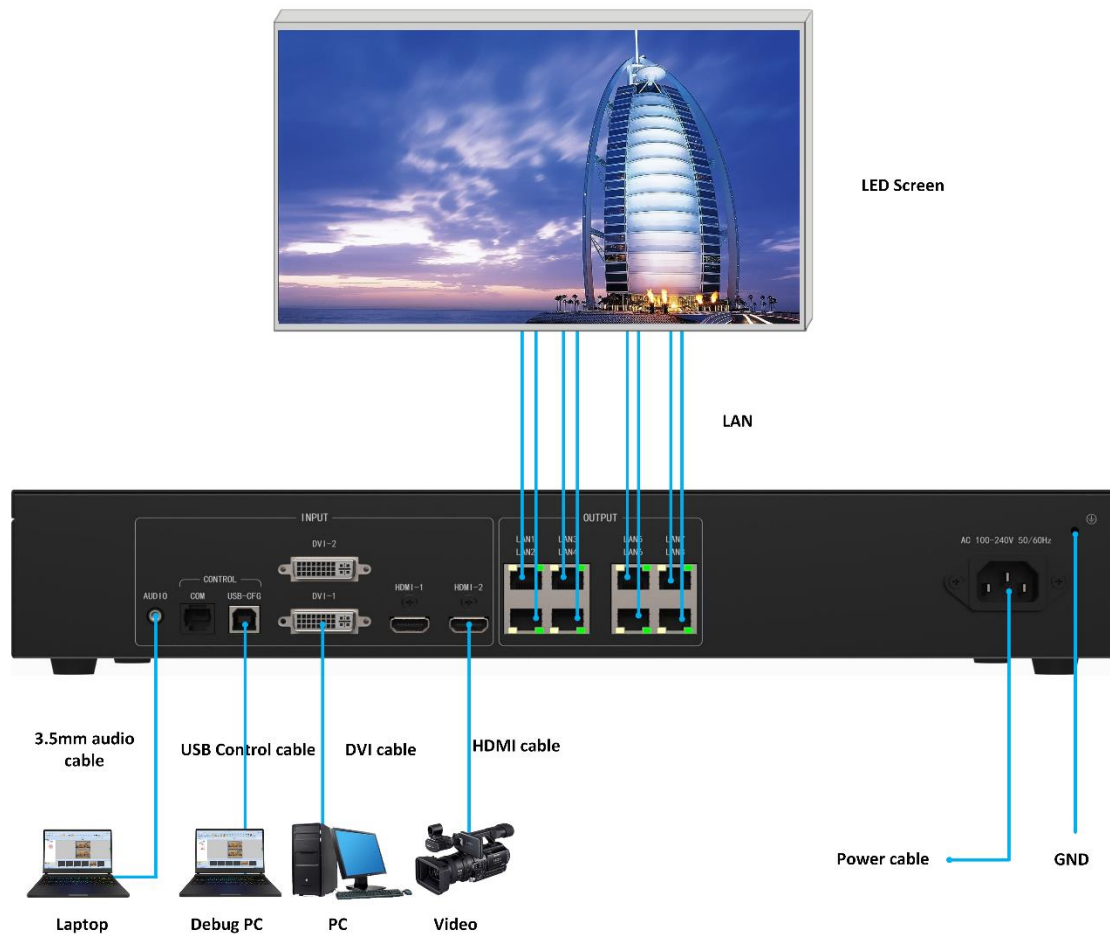
Port specifications



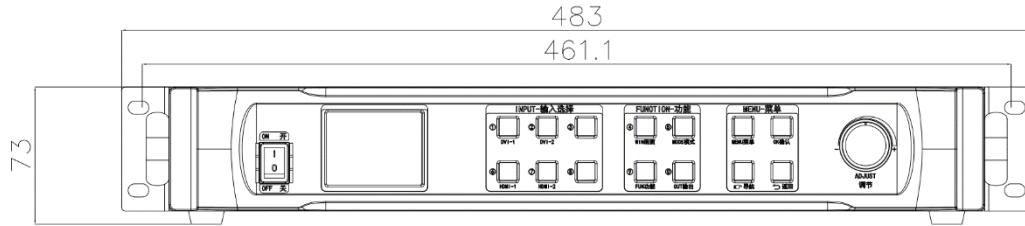
Number	Name	Function description
①	AUDIO	1/8 "TRS audio input, 3.5mm stereo interface, 2.0Vp-p/10 K Ω
②	COM	<ul style="list-style-type: none"> RS232 interface for connecting central control equipment; Data transmission rates are 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 (BT)
③	USB-CFG	USB-CFG interface, used to connect PC upper computer control
④	Input interface	<ul style="list-style-type: none"> DVI-1: maximum support 1920x1200@60Hz Support for custom resolution, with a maximum width of 2048 and a maximum of 4000 Support RGB444, YCbCr422 and YCbCr444 signal formats DVI-2: maximum support 1920x1200@60Hz Support for custom resolution, with a maximum width of 2048 and a maximum of 4000 Support RGB444, YCbCr422 and YCbCr444 signal formats HDMI-1: maximum support 1920x1200@60Hz Support for custom resolution, with a maximum width of 2048 and a maximum of 4000 Support RGB444, YCbCr422 and YCbCr444 signal formats HDMI-2: maximum support 1920x1200@60Hz Support for custom resolution, with a maximum width of 2048 and a maximum of 4000 Support RGB444, YCbCr422 and YCbCr444 signal formats
⑤	Output interface	<ul style="list-style-type: none"> LAN1-LAN8: Used to transfer data to receiving card - Single network port load: 655360 pixels - Total load: 5.2 million pixels, with a maximum width of 8,192 or a maximum of 4,096
⑥	Power	<ul style="list-style-type: none"> Connect AC power supply -100-240V AC~50/60Hz
⑦	GND	<ul style="list-style-type: none"> For equipment grounding

Whole machine specification	
Input power	100-240V AC~50/60Hz
working temperature	0-45°C
Dimensions	483×270.5×73mm (L×W×H)
Net weight	4KG
Overall Power Consumption	60W

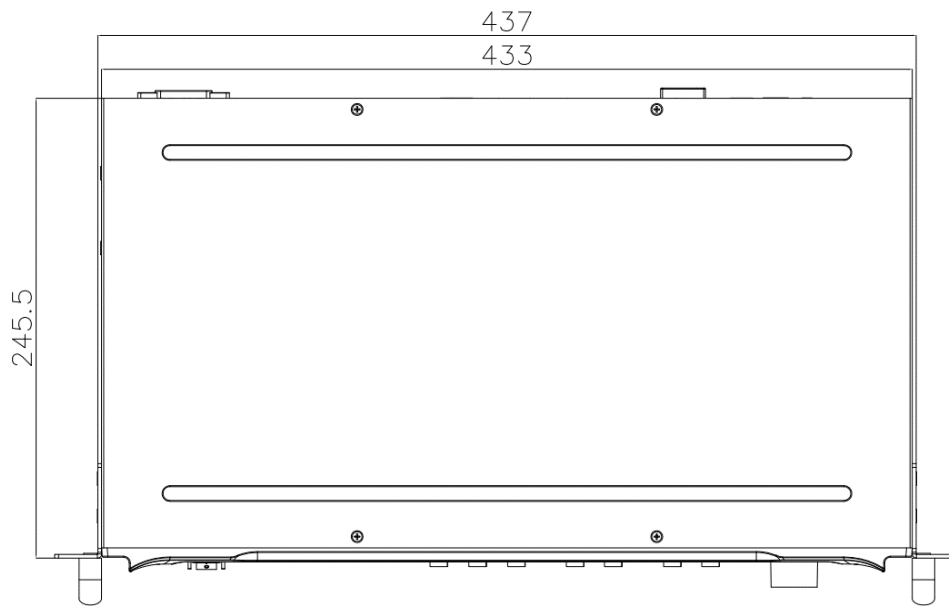
Application scenario



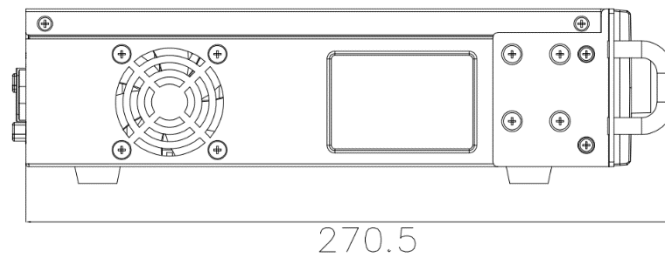
Attachment: equipment dimension drawing



Front panel dimension drawing



Top panel dimension drawing



Side dimension drawing

Unit: mm

Note: Unmarked Linear and Angular Dimension Tolerances conform to GB/T1804-M