KLS8Pro

Ten ports 2 in 1 video controller

Version: v1.1

Release Date: October 2021

Specifications

Version record

version number	Change details	release time
V1.0	First edition released	2021.07.15
V1.1	Modify the cover	2021.10.25

Summary

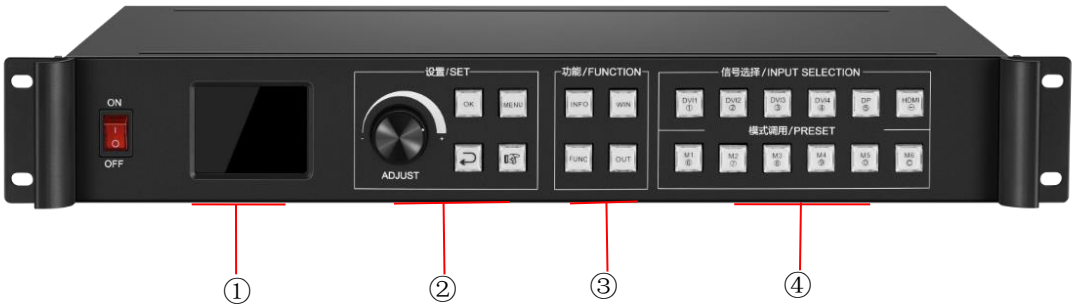
Kystar KLS8Pro two-in-one controller, supports 4K@30Hz digital signal input, has 10 network port output, the whole machine can load up to 5 million pixels, adopts pure hardware FPGA architecture, can run continuously for 365 × 24 hours, and meet the needs of small spacing Applies the configuration requirements for the large-screen control system.

Features

- Whole machine has 10 network ports, and the single network port can load 650,000 pixels. The maximum load of the whole machine is 5 million pixels. The width can reach 8,000 pixels and the height can reach 4,000 pixels.
- It supports a variety of digital signal interfaces, including 1-channel DP1.1,1-channel hdmi1.4 and 4-channel DVI-D input source.
- Support 4 windows display, screen position arbitrary layout.
- All layers support matting and transparency adjustment to achieve the best results.
- When switching different signals, it supports a variety of special effects, including fade in and fade out, up and down left and right screen, oblique up and down screen drawing, circular cut-out cut-in, diamond cut-out cut-in, comb switch.
- Support signal source hot backup.
- The input and output signals can be pre monitored.
- Support Gigabit echo function.
- 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.
- It can preset the timing of the device, and automatically perform the specified signal switching or scene calling at the specified time.

- Superimposed display of subtitles and pictures: subtitles and pictures that can be superimposed in the output screen can be stored in the device, and the user can call or close the display in real time.
- 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



Serial number	Function description
①	Full color LCD information screen
②	Parameter setting
③	Function call area
④	Signal source fast and preset save call area

Port specifications

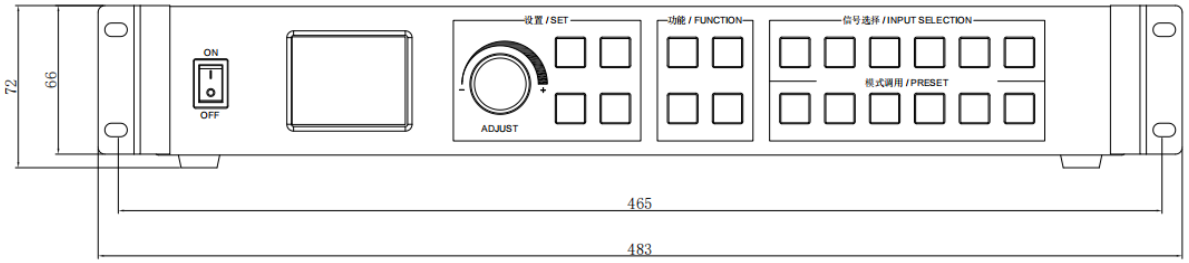
Input port		
Type	quantity	Specifications
DVI	4	Up to 1920 × 1080@60Hz
HDMI	1	HDMI 1.4 standard, up to 3840 × 2160@30Hz
DP	1	DisplayPort 1.1 standard, up to 3840 × 2160@30Hz

Output port		
Type	quantity	Specifications
LAN（1~10）	10	The output port LAN port is used to transmit data to the receiving card with maximum load of 5 million
HDMI（MONITOR）	1	Support resolution 1920 × 1080@60Hz
LAN10(IP)	1	1000m, support upper computer software echo

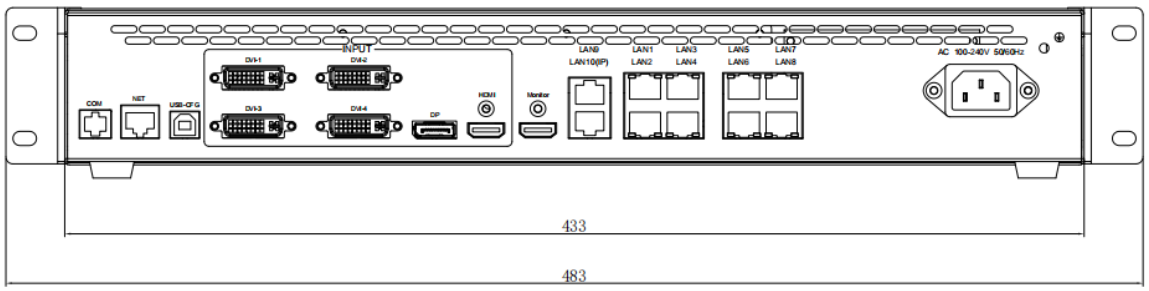
Control port		
type	quantity	Specification
USB（Type-B ）	1	USB-CFG interface is used to connect PC upper computer control
RS-232（DB-9）	1	The data transmission rates are 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 (BT)
RJ-45	1	100m, used to connect PC upper computer control

Whole machine specification	
Input power	100-240V AC~50/60Hz
working temperature	0-45℃
Dimensions	483×322×72mm（L×W×H）
Net weight	4KG
Overall Power Consumption	60W

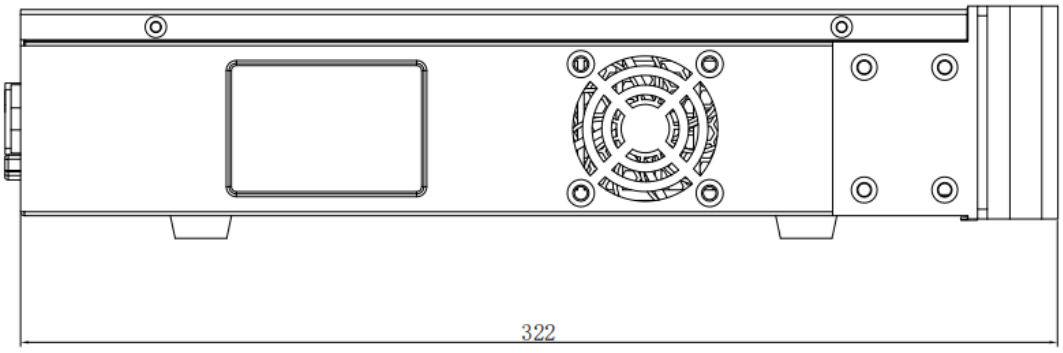
Attachment: equipment dimension drawing



Front panel dimension drawing



Dimension drawing of back panel



Side dimension drawing