

# KLS12

## Twelve ports 2-in-1 video controller

version: v2.0

Release Date: October 2022



## 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	2021.08
V1.1	Modify cover	2021.10
V2.0	Change the interface to support 4K input	2022.10

## Summary

KSV12 two-in-one controller supports 4K@30Hz digital signal input and has 12 network port outputs. The whole machine can carry a maximum load of 7.8 million pixels. It adopts a pure hardware FPGA architecture and can run continuously for 365×24 hours to meet the needs of small spacing. Application configuration requirements for large screen control systems.

## Features

- The single machine has 12 network ports. A single network port can carry 650,000 pixels. The whole machine can carry a maximum of 7.8 million pixels. The width can reach 12,000 points and the height can reach 4,000 points.
- Supports a variety of digital signal interfaces, including 1 DP1.1, 1 HDMI1.4, 2 HDMI1.3 and 2 DVI-D input sources.
- Supports 3-picture display, with arbitrary layout of picture positions.
- All layers support cutout and transparency adjustment to present the best effect.
- Supports a variety of special effects when switching between different signals, including fade in and out, up, down, left and right swiping, diagonal up and down swiping, circular cut-in and cut-in, diamond-shaped cut-in and cut-in, and comb-shaped switching.
- Support signal source hot backup.
- EDID configuration management: supports reading, modifying, and customizing EDID (Extended Display Identification Data).
- Supports one-click black screen/freeze function.
- Black border removal/cropping function: Solve the black border problem caused by front-end signals, and perform arbitrary cropping for any signal source (still maintain full screen status)
- Supports key lock to prevent misoperation.
- The overall output screen display brightness and contrast can be adjusted in real time and quickly.
- K-HDR function supports SDR to HDR image optimization technology, which can improve the contrast of ordinary SDR videos, enhance image details, and make ordinary videos have HDR effects.

## 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	quantit	Specifications
DVI	2	Supports a maximum of 1920×1200@60Hz; supports custom input resolution, with a maximum width of 4096 and a maximum of 4000.
HDMI1.3	2	HDMI1.3 standard, supports up to 1920×1200@60Hz; supports custom input resolution, with a maximum width of 4096 and a maximum of 4000.
HDMI1.4	1	HDMI1.4 standard, supports up to 3840×2160@30Hz; supports custom input resolution, with a maximum width of 7680 and a maximum of 4000.
DP	1	DisplayPort 1.1 standard, supports up to 3840×2160@30Hz; supports custom input resolution, with a maximum width of 7680 and a maximum of 4000.
1/8" TRS Audio	1	3.5mm stereo interface, 2.0Vp-p / 10 KΩ

Output port		
Type	quantit	Specifications
LAN ( 1~12 )	12	LAN port, used to transmit data to the receiving card, with a maximum load of 7.8 million

Control port		
Type	quantit	Specifications
USB ( Type-B )	1	USB-CFG interface is used to connect PC upper computer control
RJ11 ( RS-232 )	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°C
Dimensions	483×322.15×71.6mm ( L×W×H )
Net weight	4KG
Overall Power Consumption	60W

### Attachment: equipment dimension drawing

