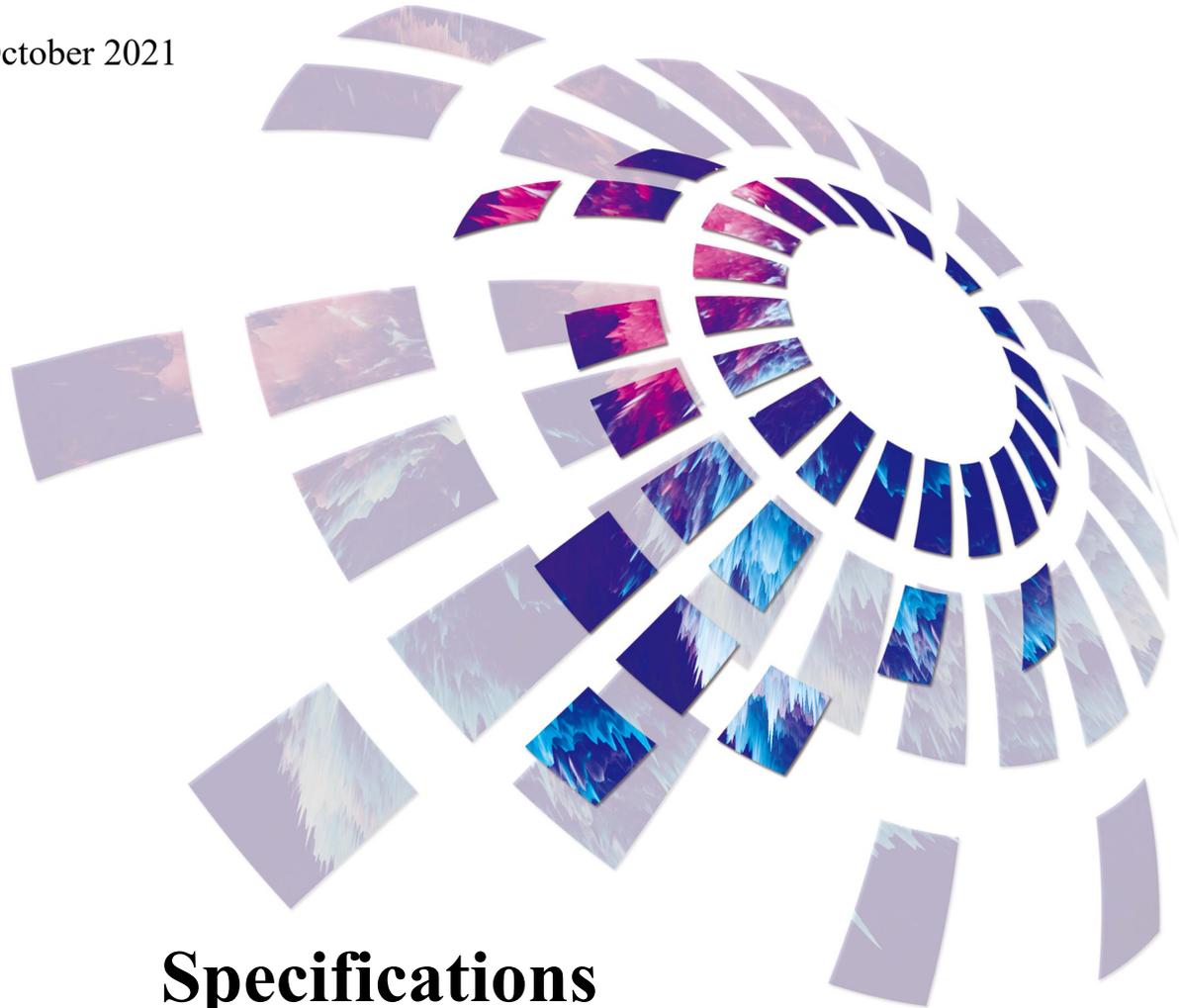


KLS12

Twelve ports 2-in-1 video controller

version: v1.1

Release Date: October 2021



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 release | 2021.08.02 |
| V1.1 | Modify the cover | 2021.10.25 |
| | | |
| | | |

Overview

KYSTAR LS12 two-in-one controller, with 12 network port output, the maximum load of the whole machine is 7.8 million pixels, adopts pure hardware FPGA architecture, can run continuously for 365×24 hours, and meets the configuration requirements of small-pitch applications for large-screen control systems

Features

- Single machine has 12 network ports, a single network port can load 650,000 pixels, and the whole machine can load a maximum of 7.8 million pixels, the width can reach 12,000 points, and the height can reach 4,000 points.
- Support multiple digital signal interfaces, including 1 DP1.1, 1 HDMI1.3 and 4 DVI-D input sources.
- Support 3 screen display, screen position arbitrary layout.
- All layers support matting, transparency adjustment, showing the best results.
- When switching between different signals, it supports a variety of special effects, including fade in and fade out, up and down left and right screen, diagonal up and down screen, circular cut-out cut-in, diamond cut-out cut-in, comb-shaped switching.
- Support signal source hot backup.
- Can set input and output signals monitor mode.
- EDID configuration management: Supports reading, modification and customization of EDID (Extended Display Identification Data).
- Support one-click black screen/static function.
- Black edge removal/cutting function: solve the black edge problem caused by the front-end signal, and do any cutting for any signal source (still keep the full screen state)
- Support key lock to prevent misoperation.
- The brightness and contrast of the overall output screen 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 video and enhance the performance of image details, so that ordinary videos have HDR effects.

Panel description



| Serial number | Function Description |
|---------------|--|
| ① | Full color LCD information screen |
| ② | Parameter settings |
| ③ | Function load area |
| ④ | Signal source fast and preset save and call area |

Port specifications



| Input port | | |
|------------|----------|--|
| Type | quantity | Specification |
| DVI | 4 | Maximum support 1920×1080@60Hz; support custom input resolution, maximum width 2048, maximum 1152. |
| HDMI | 1 | HDMI1.3 standard, maximum support 1920×1080@60Hz; support custom input resolution, maximum width 2048, maximum 1152. |
| DP | 1 | DisplayPort 1.1 standard, maximum support 1920×1080@60Hz; support custom input resolution, maximum width 2048, maximum 1152. |

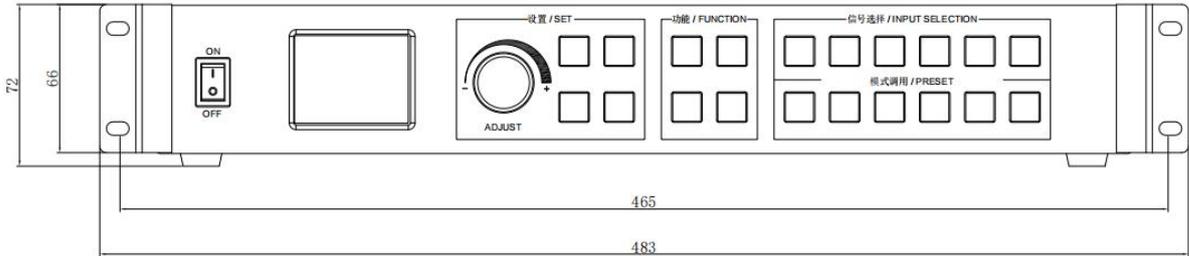
| Output port | | |
|----------------|----------|---|
| type | quantity | Specification |
| LAN (1~12) | 12 | LAN port, used to transmit data to the receiving card, with a maximum load of 7.8 million |
| HDMI (MONITOR) | 1 | Support resolution 1920×1080@60Hz |

| Control port | | |
|---------------|----------|---|
| type | quantity | Specification |
| USB (Type-B) | 1 | USB-CFG interface, used to connect PC upper computer control |
| RJ11 (RS-232) | 1 | The data transfer rate is 1200、2400、4800、9600、19200、38400、57600、115200 (BT) |
| RJ-45 | 1 | 100M, used to connect to PC upper computer control |

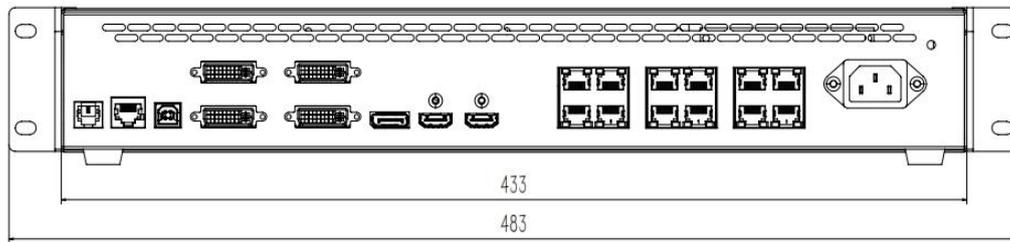
| Whole machine specification | |
|-----------------------------|----------------------|
| Input power | 100-240V AC~50/60Hz |
| Operating temperature | 0-45°C |
| Dimensions | 483×322×72mm (L×W×H) |
| net weight | 4KG |

| | |
|---------------------------------|-----|
| Whole machine power consumption | 60W |
|---------------------------------|-----|

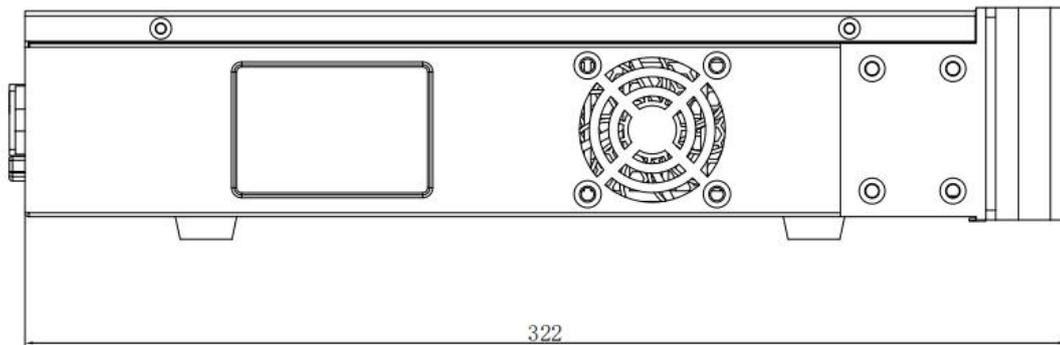
Attachment: equipment size chart



Front panel size drawing



back panel size chart



Side size drawing