

LS16C

Sixteen port 2 in 1 video controller

Version: v2.4

Release Date: November 2024



Specifications



TEL 400 159 0808
Web: www.kystar.com.cn

Beijing KYSTAR Technology Co., Ltd.

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

Summary

LS16C is a splice control processor designed for live performance LED large screen. It adopts the industry's top design technology and conforms to international and industry standards. It's industry support 4K@60Hz Input 2U device. Support k-hdr, make ordinary SDR material present HDR display effect, solve the pain of less HDR material.

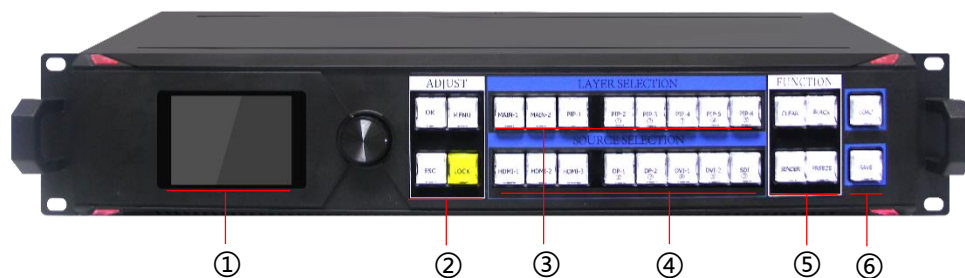
The maximum control is 10.4 million pixels, the maximum horizontal supported is 16000 pixels and the maximum vertical supported is 4000 pixels.

Functional features

- The single network port has a load of 650000 pixels, the maximum load of the whole machine is 10.4 million pixels, the maximum width can reach 16000 points, and the maximum height can reach 4000 points. The single machine has 16 network port output
- Equipped with Android 11 operating system.
- Processor: 2 high-performance cores with a minimum frequency of 1.8GHz and 4 power-saving cores with 64bit.
- Support 4K H.265 hard decoding.
- Minimum random access memory capacity of 2Gb; Minimum internal memory (storage) of 32 Gb
- Support Wi-Fi 2.4G / 5G, support Wi-Fi protocol 802.11b / g / n.
- Supports 1 DP channel / 1 Type-C channel, 1*HDMI 2.0, 1*HDMI1.4 standard, maximum support 3840 × 2160@60Hz or 7680x1080@60Hz
- 1-way DVI signal input + 1-way SDI input and loop output), multiple video signals can be switched arbitrarily.
- Supports 1 channel standard 3.5mm TRS audio input and HDMI/DP audio input.
- Minimum 16 Gigabit Ethernet ports, cascaded directly to the receiver card.
- 1 channel HDMI OUT, used for previewing the display program.
- The maximum control is 10.4 million pixels, the maximum horizontal supported is 16000 pixels and the maximum vertical supported is 4000 pixels.
- 1 Standard 3.5mm TRS two-channel audio output
- Supports ONLINE signal input 4K@60Hz, point-to-point display
- Support preset 8 display scenarios.
- Support brightness adjustment and key lock function.

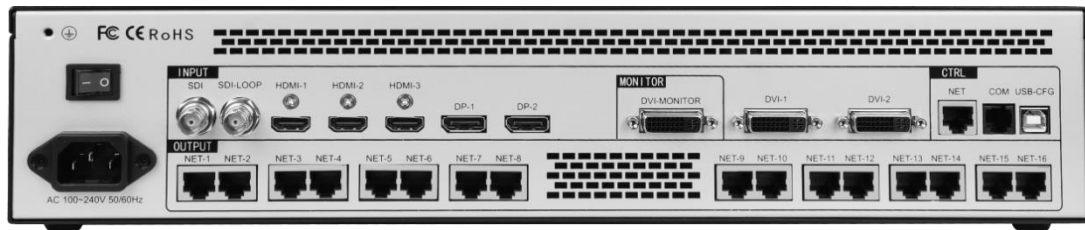
- All layers support matting and transparency adjustment for the best effect
- Humanized interactive control interface, with front-end switch, LCD information color screen, crystal keys and knobs
- EDID configuration management: support the reading, modification and customization of EDID (extended display identification data)
- Support one button black screen / still
- Black edge removal / clipping function: solve the problem of black edge generated by front-end signal, and make arbitrary clipping for any signal source (still maintain full screen state)
- Support K-HDR, make common SDR material present HDR display effect, solve the pain of less HDR material
- Monitor port output supports both monitor input and output at the same time, and supports configuration to look back at output.

Panel description



Serial number	Function description
①	Full color LCD information screen
②	Parameter setting and debugging area
③	Layer (window) quick selection area
④	Fast selection area of signal source
⑤	Display mode, sending card information area
⑥	Preset save call area

Port specification



Input port		
Type	number	Specifications
DVI	2	1.3 standard, maximum support $1920 \times 1080@60\text{Hz}$
SDI (BNC)	1+1 (LOOP)	Support SD/HD/3G-SDI, multiple video signals can be switched arbitrarily.
HDMI	2	1.3A standard, 1.4 maximum support $1920 \times 1080@60\text{Hz}$
HDMI2.0	1	Hdmi 2.0 standard, up to $3840 \times 2160@60\text{Hz}$ or $7680 \times 1080@60\text{Hz}$
DP1.2	2	DisplayPort 1.2 standard, maximum support $3840 \times 2160@60\text{Hz}$ or $7680 \times 1080@60\text{Hz}$
Audio	1	Support 1 standard 3.5mm TRS two-channel audio input and HDMI / DP audio input.

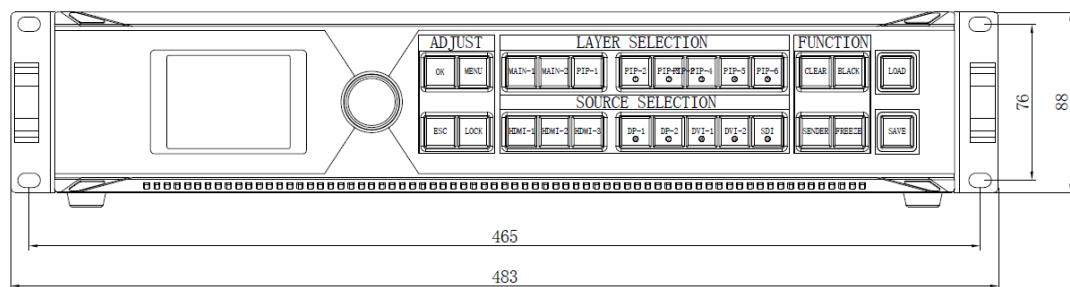
Output port		
Type	number	Specifications
LAN	16	Minimum 16 Gigabit Ethernet ports, cascade directly to the receiving card.
DVI-I	1	Monitor port, resolution $1920 \times 1080@60\text{Hz}$
HDMI	1	Channel HDMI OUT, used for previewing the display program.
Audio	1	Supports 1 Standard two-channel audio output TRS 3.5mm function

Control port		
Type	number	Specifications
USB (Type-B)	1	USB-cfg interface is used to connect PC to control

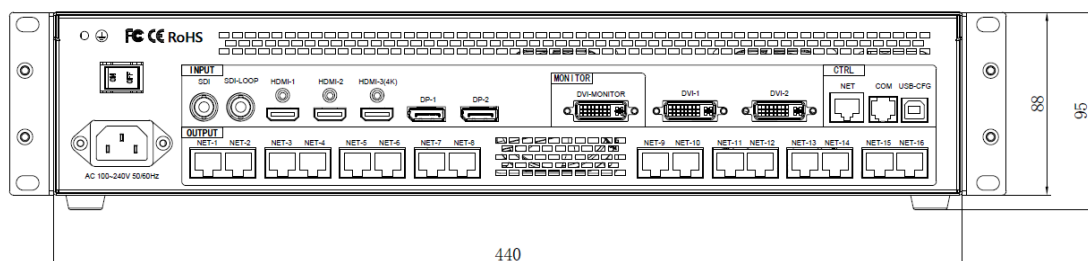
RS-232 (DB-9)	1	The data transmission rate is 50、75、100、150、300、600、1200、2400、4800、9600、19200、38400 (BT)
RJ-45	1	100M

Whole machine specification	
Input power	100-240V AC~50/60Hz 0.6A
working temperature	0-45°C
Dimensions	488×360×89mm (L×W×H)
Net weight	6KG
Overall power consumption	55W

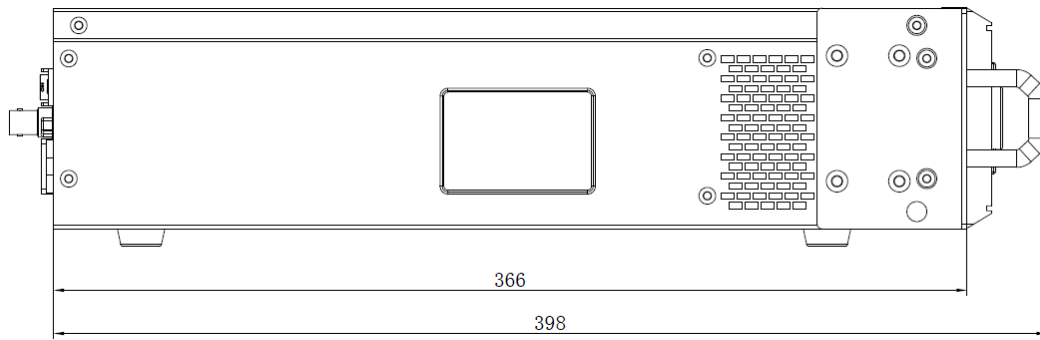
Attachment: equipment dimension drawing



Front panel dimension drawing



Back panel dimension drawing



Side panel dimension drawing