LED Video Controller

Specification V1.6

Overview

LED video controller is a professional control system and video processing equipment specially designed for LED engineering applications. It is shipped with various video signal interfaces, supports high-definition digital ports (DVI, HDMI, SDI) and their seamless switching, allowing broadcast quality scaling and multi-pictures display.
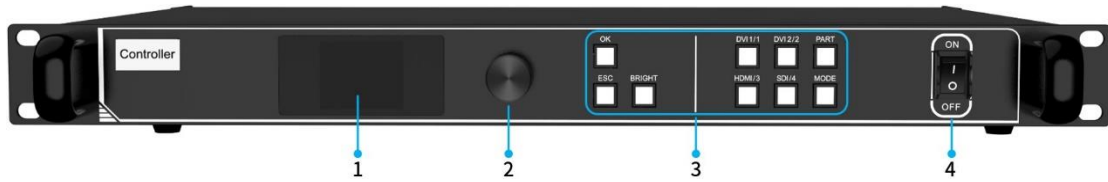
With 6 Gigabit Ethernet outputs, the controller supports LED display with maximum 8192 pixels in width or 4096 pixels in height. Also, used with a series of versatile functions for a flexible screen control and high-quality image display, the controller enjoys strong advantages in LED engineering applications.

Features

- Various digital signal ports, including $2\times$ DVI, $1\times$ HDMI, $1\times$ SDI.
- Loading capacity of up to 3.9 million pixels, with maximum 8192 pixels in width or maximum 4096 pixels in height.
- Input resolution up to $1920\times1200@60Hz$.
- 6 Gigabit Ethernet output ports, supports Ethernet port redundancy or controller redundancy.
- User-definable video source switching and scaling.
- Up to 3 layers, easily customize position and size.
- Independent audio input and HDMI audio decoding.
- RS232 protocol.
- HDCP.
- Brightness and color temperature adjustment.
- Supports Better Gray Level at Low Brightness, can effectively maintain the complete display of grey scale under low brightness.
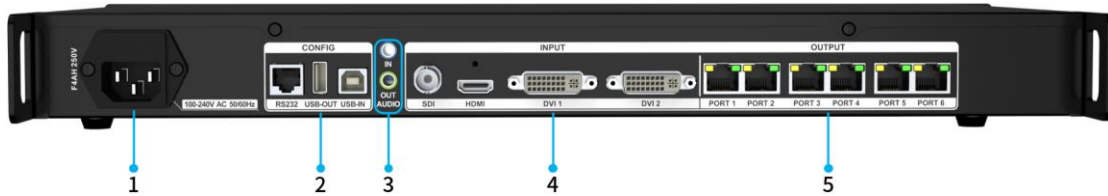
Hardware

Front panel

| No.	Name	Function
1	LCD	Display the operation menu and system information.
2	Knob	Select an item or adjust the parameter, press the knob to confirm your selection or adjustment.
3	Function keys	• **OK**: Confirm button. • **ESC**: Exit the current operation or back to previous menu. • **BRIGHT**: Tune brightness. • **PART**: Crop Screen. • **MODE**: Select a preset. • **1~4**: Quick selection of preset.
	Selection keys	**DVI 1 / DVI 2 / HDMI / SDI**: Video source selection.
4	Power button	Switch On / Off.

Rear panel

Power		
1	MAINS INPUT	AC100-240V, 50 / 60Hz, connect to AC power supply, built-in fuse.
Control		
2	RS232	*RJ11 port(6p6c), connect to third-party device.
	USB IN	USB port input, connect to a PC for debugging or cascading input.
	USB OUT	USB port output, as cascading output.
Audio		
3	AUDIO IN	• Interface type: 3.5mm. • Receive audio signals from computers or other audio sources.
	AUDIO OUT	• Interface type: 3.5mm. • Support HDMI audio decoding and output audio signals to devices such as active speakers.

Input		
4	DVI 1, DVI 2	2× DVI input.
	HDMI	1× HDMI1.4 input.
	SDI	1× SDI input, support 3G-SDI standard and de-interlacing.
Output		
5	PORT 1-6	RJ45, 6× 1G Ethernet ports output.

* DB9 female to RJ11(6P6C) cable:

A	B
2	3(TXD)
3	4(RXD)
5	5(GND)
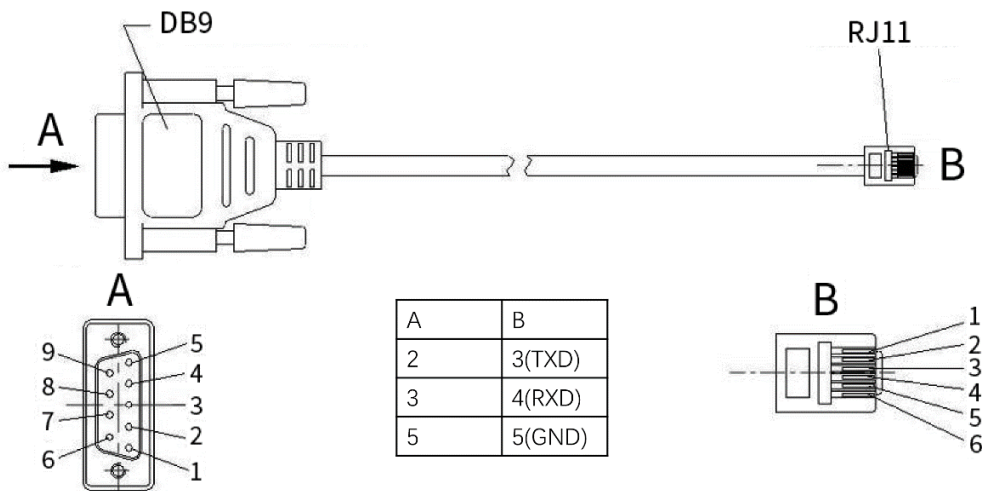
Signal format

Input	Color space	Sampling	Color depth	Resolution	Frame rate
DVI	YCbCr	4:2:2	8bit	1920×1200@60hz	23.98, 24, 25, 29.97, 30, 50, 59.94, 60
	YCbCr	4:4:4	8bit		
	RGB	4:4:4	8bit		
HDMI1.4	YCbCr	4:2:2	8bit	1920×1200@60hz	23.98, 24, 25, 29.97, 30, 50, 59.94, 60
	YCbCr	4:4:4	8bit		
	RGB	4:4:4	8bit		
SDI	YCbCr	4:2:2	8bit	1920×1080i	50,59.94,60
	YCbCr	4:2:2	8bit	1920×1080p	50,59.94,60
	YCbCr	4:2:2	8bit	1280×720p	23.98,24,25,29.97,30, 50,59.94,60

Parameters

Dimensions （W×H×D)	
Unboxed	482.6mm(19.0")×44.0mm(1.7")×306.2mm (12.1"),1U chassis (w / o foot pads)
Boxed	525.0mm (20.7")×95.0mm (3.7")×355.0mm (14.0")
Weight	
Net weight	3.07kg (6.77lbs)
Total weight	4.28kg (9.44lbs)
Electrical specification	
Power input	AC100-240V, 1.0A, 50 / 60Hz
Rated power	30W (With all cards installed)
Operating environment	
Temperature	-20°C~60°C / -4°F~140°F
Humidity	0%RH~80%RH, non-condensing
Storage environment	
Temperature	-30°C~80°C / -22°F~176°F
Humidity	0%RH~90%RH, non-condensing

Reference dimensions

Unit: mm